

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2018 Levee Maintenance Deficiency Summary Report**

**Overall LMA & Unit Ratings, including DWR Erosion Survey**

***San Joaquin River Basin***

<b>RD0544</b>	Overall LMA Rating	Total LMA Miles						
<b>Reclamation District No. 0544 Upper Roberts Island</b>	<b>U</b>	<b>10.20</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	1.18	4.95	20.98	205.66%		0.07		
Trim / Thin Trees	0.24	0.09	0.60	5.88%				
Encroachments	0.02	0.02	0.10	0.98%	0.39	0.11		
Animal Control	0.57	0.27	1.65	16.17%				
Slope Stability	0.04	0.01	0.08	0.78%				
Erosion / Bank Caving	0.03	0.09	0.39	3.82%				
Crown Surface / Depressions / Rutting	0.22		0.22	2.16%				
Flood Preparedness & Training	0.10		0.10	0.98%				
<i>Interior Drainage &amp; Piping Systems</i>								
Erosion Areas		0.01	0.04	0.39%				
<i>Supplemental</i>								
DWR Erosion Survey	0.04		0.04	0.39%				
DWR UCIP Field Study					0.19	0.05		
<i>LMA Totals:</i>	2.44	5.44	24.20	237.22%	0.58	0.23	0.00	0.00

<b>Unit No. 01 San Joaquin River LB</b>	Overall Unit Rating	Total Unit Miles						
<b>RD0544</b>	<b>U</b>	<b>6.05</b>						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.47	2.94	12.23	202.26%		0.07		
Trim / Thin Trees	0.19	0.09	0.55	9.10%				
Encroachments	0.02	0.01	0.06	0.99%	0.30	0.03		
Animal Control	0.10	0.20	0.90	14.88%				
Slope Stability	0.02	0.01	0.06	0.99%				
Erosion / Bank Caving	0.02	0.05	0.22	3.64%				
Crown Surface / Depressions / Rutting	0.22		0.22	3.64%				
<i>Supplemental</i>								
DWR Erosion Survey	0.01		0.01	0.17%				
DWR UCIP Field Study					0.11	0.03		
<i>Unit Totals:</i>	1.05	3.30	14.25	235.67%	0.41	0.13	0.00	0.00

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2018 Levee Maintenance Deficiency Summary Report**

**Overall LMA & Unit Ratings, including DWR Erosion Survey**

***San Joaquin River Basin (cont.)***

Unit No. 02 Old River RB	Overall Unit Rating	Total Unit Miles						
RD0544	U	4.15						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	0.71	2.01	8.75	210.60%				
Trim / Thin Trees	0.05		0.05	1.20%				
Encroachments		0.01	0.04	0.96%	0.09	0.08		
Animal Control	0.47	0.07	0.75	18.05%				
Slope Stability	0.02		0.02	0.48%				
Erosion / Bank Caving	0.01	0.04	0.17	4.09%				
Interior Drainage & Piping Systems								
Erosion Areas		0.01	0.04	0.96%				
Supplemental								
DWR Erosion Survey	0.03		0.03	0.72%				
DWR UCIP Field Study					0.08	0.02		
Unit Totals:	1.29	2.14	9.85	237.07%	0.17	0.10	0.00	0.00

**Flood Control Project Maintenance  
Levee Inspections****LMA District Cover Sheet****Fall 2018 Levee Inspection Results****Reclamation District No. 0544 Upper Roberts Island**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			U	

\*\* Non-receipt of Summer or Winter Inspection  
Reports may effect overall annual rating.

† **SPRING INSPECTIONS:** Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

**FALL INSPECTIONS:** The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2018 Levee Inspection Results**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Left	6.05
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>U</b>	
Date of Inspection	4/26/2018 - 4/26/2018		9/13/2018 - 9/13/2018	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By	Richard Toy KSN		Richard Toy KSN	

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>0.00</b>	Rating **	M	Issue No.	<b>66</b>
LM End	<b>0.00</b>	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD0544_01_s_2012_66				
Comment Code					
Inspector Comment					
The LMA has a good working knowledge of flood response. However, LMA has not been involved in flood training for several years.					

No Photos

LM Start	<b>0.00</b>	Rating **	A	Issue No.	<b>71</b>
LM End	<b>0.00</b>	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD0544_01_s_2013_71				
Comment Code					
Inspector Comment					
The LMA has a copy of O&M manual on file in the office.					

No Photos

LM Start	<b>0.00</b>	Rating **	A	Issue No.	<b>72</b>
LM End	<b>0.00</b>	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD0544_01_s_2013_72				
Comment Code					
Inspector Comment					
The LMA maintains an adequate supply of floodfight material.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.01	Rating **	M	Issue No.	152
LM End	0.01	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.870356 °	37.870356 °
				-121.329852 °	-121.329852 °
DWR ID	22640				
Comment Code					
Inspector Comment					
FS_ID:41906 DS_ID:22640 EP_NO: 4116 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to contact owner to determine status.- a signboard on waterside shoulder and across the river.- no indicators on landside. FIELD_STRUCT_DESC: 8.625-inch steel natural gas pipeline through the levees and under the river, 3.9 feet below the crown. Waterside (WS) slope rock revetted. (Plans for installation of an 8.625-inch gas line under the San Joaquin River and through the levees authorized under Permit No. 4116, 1962 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.01)]. FS Date: 10/29/2013					

LM Start	<b>0.01</b>	Rating **	M	Issue No.	<b>152 (cont)</b>
LM End	<b>0.01</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_41906\_41713.jpg



WS view: a signboard indicating a gasline on levee shoulder.

Photo 2 of 3 : UCIP\_FA\_2018\_41906\_41712.jpg



WS view: a signboard indicating a gasline across the river channel.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.01	Rating **	M	Issue No.	152 (cont)	
LM End	0.01	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.870356 °	37.870356 °	
				-121.329852 °	-121.329852 °	
DWR ID	22640					
Comment Code						
Inspector Comment						
FS_ID:41906 DS_ID:22640 EP_NO: 4116 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to contact owner to determine status.- a signboard on waterside shoulder and across the river.- no indicators on landside. FIELD_STRUCT_DESC: 8.625-inch steel natural gas pipeline through the levees and under the river, 3.9 feet below the crown. Waterside (WS) slope rock revetted. (Plans for installation of an 8.625-inch gas line under the San Joaquin River and through the levees authorized under Permit No. 4116, 1962 - Pacific Gas and Electric Company [PG&E]). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.01)]. FS Date: 10/29/2013						

Photo 3 of 3 : UCIP\_FA\_2018\_41906\_41711.jpg



WS view: closer view of a signboard indicating a gasoline on levee shoulder.

LM Start	0.01	Rating **	M	Issue No.	153	
LM End	0.01	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.870296 °	37.870296 °	
				-121.329826 °	-121.329826 °	
DWR ID	24713					
Comment Code						
Inspector Comment						
FS_ID:23851						
DS_ID:24713						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Appears abandoned.May need proper abandonment.Pipe exposed on landside slope.						
FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel pipe of an unknown purpose through the levee, 2 feet below the crown. Appears abandoned. Only visible on the landside (LS) slope. No pipe or other features visible on the waterside (WS).						
FS Date: 10/29/2013						

Photo 1 of 3 : UCIP\_FA\_2018\_23851\_41728.jpg



LS view: exposed 12-inch steel pipe on levee slope. Appears abandoned.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.01	Rating **	M	Issue No.	153 (cont)	
LM End	0.01	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.870296 °	37.870296 °	
				-121.329826 °	-121.329826 °	
DWR ID	24713					
Comment Code						
Inspector Comment						
FS_ID:23851						
DS_ID:24713						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Appears abandoned.May need proper abandonment.Pipe exposed on landside slope.						
FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel pipe of an unknown purpose through the levee, 2 feet below the crown. Appears abandoned. Only visible on the landside (LS) slope. No pipe or other features visible on the waterside (WS).						
FS Date: 10/29/2013						

LM Start	<b>0.01</b>	Rating **	M	Issue No.	<b>153 (cont)</b>
LM End	<b>0.01</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_23851\_41727.jpg



LS view: a 12-inch steel pipe on levee slope. Holes on the pipe, appears abandoned.

Photo 3 of 3 : UCIP\_FA\_2018\_23851\_41726.jpg



WS view: no pipe and appurtenances found on waterside.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.01	Rating **	M	Issue No.	92
LM End	0.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.870285 °	37.870285 °
				-121.329822 °	-121.329822 °
DWR ID	DWR_RD0544_01_f_2014_92				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed tree on landside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_92\_20180906\_00066.jpg



Looking southwest at untrimmed tree on landward slope.

LM Start	0.06	Rating **	M	Issue No.	4
LM End	0.19	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.869606 °	37.868163 °
				-121.329571 °	-121.328132 °
DWR ID	DWR_RD0544_01_s_2012_4				
Comment Code					
EQ : Equipment					
Inspector Comment					
Farm equipment and supplies stored at landside toe.					

Photo 1 of 5 : FA\_2018\_RD0544\_108\_4\_20180906\_00005.jpg



Looking west at equipment stored at landward toe fall 2015

LM Start	<b>0.06</b>	Rating **	M	Issue No.	<b>4 (cont)</b>
LM End	<b>0.19</b>	Issue Type +	En	Location *	LS

Photo 2 of 5 : FA\_2018\_RD0544\_108\_4\_20180906\_00006.jpg



Looking southwest at equipment stored at landward toe fall 2015.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>0.06</b>	Rating **	M	Issue No.	<b>4 (cont)</b>
LM End	<b>0.19</b>	Issue Type +	En	Location *	LS

A line of yellow bulldozers is working on a large construction site, pushing dirt and debris. A flatbed trailer is visible in the foreground.

LM Start	<b>0.06</b>	Rating **	M	Issue No.	<b>4 (cont)</b>
LM End	<b>0.19</b>	Issue Type +	En	Location *	LS

Looking south at equipment along landside toe.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement



## Levee Inspection Report By Mile - Fall 2018


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

Photo 1 of 1 : FA\_2018\_RD0544\_108\_118\_20180906\_00084.jpg



Looking west at landside erosion for shoulder to middle of levee slope.

Photo 1 of 1 : FA\_2018\_RD0544\_108\_85\_20180906\_00061.jpg



Looking southwest at Irrigation ditch at landward toe.

Wednesday, December 26, 2018 18:31 **FINAL DATA** Page 7 of 9

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.38	Rating **	M	Issue No.	154	
LM End	0.38	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.865468 °	37.865468 °	
				-121.327602 °	-121.327602 °	
DWR ID	22643					
Comment Code						
Inspector Comment						
FS_ID:41974 DS_ID:22643 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Dense vegetation on waterside. FIELD_STRUCT_DESC: *ABANDONED* Pipe of an unknown size, material, or purpose through the levee, approximately 8 feet below the crown. Plugged by USACE in 1962. [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/29/2013						

No Photos

LM Start	0.42	Rating **	M	Issue No.	2
LM End	0.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.864958 °	37.864958 °
				-121.327142 °	-121.327142 °
DWR ID	DWR_RD0544_01_s_2012_2				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Large untrimmed tree on landside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_2\_20180906\_00002.jpg



Looking southwest at untrimmed tree on landward slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.45	Rating **	M	Issue No.	1
LM End	0.45	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.864713 °	37.864713 °
				-121.326708 °	-121.326708 °
DWR ID	DWR_RD0544_01_f_2013_1				
Comment Code					
MA : Material					
Inspector Comment					
Old broken concrete pipes on waterside berm.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_1\_20180906\_00001.jpg



Looking northeast at broken concrete piping on waterward berm.

LM Start	0.48	Rating **	U	Issue No.	3
LM End	0.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.864578 °	37.863753 °
				-121.326210 °	-121.322835 °
DWR ID	DWR_RD0544_01_s_2012_3				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation on waterside and landside slopes.					

Photo 1 of 2 : FA\_2018\_RD0544\_108\_3\_20180906\_00003.jpg



Looking southeast at the waterside slope.

LM Start	<b>0.48</b>	Rating **	U	Issue No.	<b>3 (cont)</b>
LM End	<b>0.67</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2018\_RD0544\_108\_3\_20180906\_00004.jpg



Looking south at dense veg on waterward slope.

**\* Location**  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

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**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.55	Rating **	M	Issue No.	61
LM End	0.63	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.864359 °	37.864011 °
				-121.324939 °	-121.323562 °
DWR ID	DWR_RD0544_01_f_2013_61				
Comment Code					
C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.					
Inspector Comment					

No Photos

LM Start	0.64	Rating **	A/W	Issue No.	75
LM End	0.64	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.863900 °	37.863900 °
				-121.323500 °	-121.323400 °
DWR ID	DWR_RD0544_01_f_2017_75				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:571					
Site Designation:LMA-477					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_571\_4478.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.64	Rating **	A/W	Issue No.	75 (cont)
LM End	0.64	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.863900 °	37.863900 °
				-121.323500 °	-121.323400 °
DWR ID	DWR_RD0544_01_f_2017_75				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:571					
Site Designation:LMA-477					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 2 of 3 : LEVAL\_FA\_2018\_571\_4480.jpg



LM Start	<b>0.64</b>	Rating **	A/W	Issue No.	<b>75 (cont)</b>
LM End	<b>0.64</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_571\_4487.jpg

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



# Reclamation District No. 0544 Upper Roberts Island

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.78	Rating **	M	Issue No.	73
LM End	0.78	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.863016 °	37.863016 °
				-121.321137 °	-121.321137 °
DWR ID	DWR_RD0544_01_f_2013_73				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

LM Start	0.81	Rating **	M	Issue No.	93
LM End	0.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.862694°	37.862694°
				-121.320887°	-121.320887°
DWR ID	DWR_RD0544_01_f_2014_93				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_93\_20180906\_00067.jpg



Looking west at untrimmed trees on landward slope and toe fall 2015.

**\* Location**  
 LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

**\*\* Rating**  
 A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
 Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.99	Rating **	A/W	Issue No.	77
LM End	1.02	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.860400 °	37.860200 °
				-121.320300 °	-121.319700 °
DWR ID	DWR_RD0544_01_f_2017_77				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:570					
Site Designation:LMA-476					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_570\_4597.jpg



LM Start	<b>0.99</b>	Rating **	A/W	Issue No.	<b>77 (cont)</b>
LM End	<b>1.02</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_570\_4598.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.99	Rating **	A/W	Issue No.	77 (cont)
LM End	1.02	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.860400 °	37.860200 °
				-121.320300 °	-121.319700 °
DWR ID	DWR_RD0544_01_f_2017_77				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:570					
Site Designation:LMA-476					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 3 of 3 : LEVAL\_FA\_2018\_570\_4602.jpg



LM Start	1.12	Rating **	M	Issue No.	39
LM End	1.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.859423°	37.859423°
				-121.318328°	-121.318328°
DWR ID	DWR_RD0544_01_s_2012_39				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landside slope.					

Photo 1 of 2 : FA\_2018\_RD0544\_108\_39\_20180906\_00031.jpg



Looking southwest at landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.44	Rating **	U	Issue No.	42
LM End	1.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.855617 °	37.855617 °
				-121.321157 °	-121.321157 °
DWR ID	DWR_RD0544_01_f_2018_42				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_42\_20180919\_00173.jpg



Looking at untrimmed tree at landward toe. (Fall 2018)

LM Start	1.44	Rating **	N	Issue No.	14
LM End	1.44	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.855583 °	37.855583 °
				-121.321177 °	-121.321177 °
DWR ID	DWR_RD0544_01_s_2012_14				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					

No Photos

LM Start	1.46	Rating **	M	Issue No.	87
LM End	1.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.855416 °	37.855043 °
				-121.321171 °	-121.321122 °
DWR ID	DWR_RD0544_01_s_2015_87				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_87\_20180906\_00062.jpg



Looking west at untrimmed tree at landward toe fall 2015.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

Photo 1 of 3 : FA\_2018\_RD0544\_108\_119\_20180906\_00085.jpg



Looking southeast at damaged waterward slope fall 2015.

Photo 2 of 3 : FA\_2018\_RD0544\_108\_119\_20180906\_00086.jpg



Looking east at damaged waterward slope fall 2015.

Photo 3 of 3 : FA\_2018\_RD0544\_108\_119\_20180906\_00087.jpg



Looking southeast at damaged waterward slope fall 2015

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable	A : Acceptable                      N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable            C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable                      A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.56	Rating **	U	Issue No.	43
LM End	1.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.854068 °	37.853980 °
				-121.321387 °	-121.324213 °
DWR ID	DWR_RD0544_01_s_2012_43				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation waterside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_43\_20180906\_00034.jpg



Looking east at dense veg on waterward slope.

LM Start	1.59	Rating **	M	Issue No.	95
LM End	1.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.854299 °	37.854299 °
				-121.321865 °	-121.321865 °
DWR ID	DWR_RD0544_01_s_2018_95				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed tree on landside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_95\_20180906\_00068.jpg



Looking southwest at untrimmed tree on landward slope.

LM Start	1.63	Rating **	C	Issue No.	79
LM End	1.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.854598 °	37.854598 °
				-121.322320 °	-121.322320 °
DWR ID	DWR_RD0544_01_s_2017_79				
Comment Code					
GA : Garbage					
Inspector Comment					
Remove abandoned stairs to boat dock.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.63	Rating **	U	Issue No.	146
LM End	1.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.854643 °	37.854643 °
				-121.322429 °	-121.322429 °
DWR ID	DWR_RD0544_01_f_2017_146				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Large rodent hole on landside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_146\_20180906\_00129.jpg



Looking east at the landside slope.

LM Start	1.64	Rating **	M	Issue No.	145
LM End	1.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.854673 °	37.854673 °
				-121.322492 °	-121.322492 °
DWR ID	DWR_RD0544_01_f_2017_145				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_145\_20180906\_00128.jpg



Looking northwest at the landside slope.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>1.67</b>	Rating **	A/W	Issue No.	<b>78</b>
LM End	<b>1.70</b>	Issue Type +	Ob	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.854920°	37.854850°
				-121.323040°	-121.323770°
DWR ID	DWR_RD0544_01_f_2017_78				
Comment Code					
Inspector Comment					
Levee Evaluation Comments Description: Site ID No:93 Site Designation:189-109 Repair Type: Seepage Rating: Field Date: Notes:					

No Photos

**\* Location**  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.72	Rating **	M	Issue No.	155	
LM End	1.72	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.854506 °	37.854506 °	
				-121.323886 °	-121.323886 °	
DWR ID	22648					
Comment Code						
Inspector Comment						
FS_ID:51351 DS_ID:22648 EP_NO: 4114 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 12/22/2016: No signs of erosion or depressions found on either levee slope. Slope may have been backfilled but cause of original depression (likely a pipe integrity problem) may not have been addressed. Walkway still in poor structural condition. Downgraded this crossing from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:- levee depression on both sides of the levee.- 2-inch electric conduit on waterside and service pole on landside.Walkway in poor structural condition. (P. Amatya - DWR) FIELD_STRUCT_DESC: 18-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump mounted on a pile structure pier in the river. Siphon breaker on the apex of the pipe on the landside (LS) slope. Concrete standpipe at the LS toe. 2-inch electrical conduit through the levee. Service pole at the LS toe. (Plans to install a pump, pump structure, and one 20-inch pipeline through the levee authorized under Permit No. 4114, 1962 - Katie M. Feck). [Additional Reference(s): DWR Levee Log, 2005, 14-inch pipe referenced, 4.2 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.73), 20-inch pipe, 4.2 feet below the crown, referenced]. FS Date: 12/22/2016						

LM Start	<b>1.72</b>	Rating **	M	Issue No.	<b>155 (cont)</b>
LM End	<b>1.72</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_51351\_41786.jpg



WS view: pipe, conduit, walkway, and pump on levee slope.

Photo 2 of 3 : UCIP\_FA\_2018\_51351\_41785.jpg



WS view: pump on wooden pile structure in the stream.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.72	Rating **	M	Issue No.	155 (cont)	
LM End	1.72	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.854506 °	37.854506 °	
				-121.323886 °	-121.323886 °	
DWR ID	22648					
Comment Code						
Inspector Comment						
FS_ID:51351 DS_ID:22648 EP_NO: 4114 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 12/22/2016: No signs of erosion or depressions found on either levee slope. Slope may have been backfilled but cause of original depression (likely a pipe integrity problem) may not have been addressed. Walkway still in poor structural condition. Downgraded this crossing from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:- levee depression on both sides of the levee.- 2-inch electric conduit on waterside and service pole on landside.Walkway in poor structural condition. (P. Amatya - DWR) FIELD_STRUCT_DESC: 18-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump mounted on a pile structure pier in the river. Siphon breaker on the apex of the pipe on the landside (LS) slope. Concrete standpipe at the LS toe. 2-inch electrical conduit through the levee. Service pole at the LS toe. (Plans to install a pump, pump structure, and one 20-inch pipeline through the levee authorized under Permit No. 4114, 1962 - Katie M. Feck). [Additional Reference(s): DWR Levee Log, 2005, 14-inch pipe referenced, 4.2 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.73), 20-inch pipe, 4.2 feet below the crown, referenced]. FS Date: 12/22/2016						

Photo 3 of 3 : UCIP\_FA\_2018\_51351\_41784.jpg



WS view: depression on levee shoulder near walkway. Half of the walkway stripped off.

LM Start	1.78	Rating **	M	Issue No.	88	
LM End	1.78	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Trim / Thin Trees			37.853770 °		37.853770 °
				-121.324293 °		-121.324293 °
DWR ID	DWR_RD0544_01_s_2015_88					
Comment Code						
T1 : Trim trees to at least five feet above ground level.						
Inspector Comment						

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.82	Rating **	U	Issue No.	80
LM End	1.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.853173 °	37.853173 °
				-121.324145 °	-121.324145 °
DWR ID	DWR_RD0544_01_s_2017_80				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Repair slope damage due to water runoff.					

Photo 1 of 2 : FA\_2018\_RD0544\_108\_80\_20180906\_00057.jpg



Looking west at slope damage due to rain runoff on waterward slope.

LM Start	<b>1.82</b>	Rating **	U	Issue No.	<b>80 (cont)</b>
LM End	<b>1.82</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA\_2018\_RD0544\_108\_80\_20180906\_00058.jpg



Looking south at slope damage due to rain runoff on waterward slope.

LM Start	1.84	Rating **	C	Issue No.	64
LM End	1.93	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.852971 °	37.851746 °
				-121.324096 °	-121.323328 °
DWR ID	DWR_RD0544_01_f_2015_64				
Comment Code					
GA : Garbage					
Inspector Comment					
Plastic sheeting and rubber tires stored at landward toe.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.88	Rating **	M	Issue No.	81
LM End	1.88	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.852327 °	37.852327 °
				-121.323767 °	-121.323767 °
DWR ID	DWR_RD0544_01_f_2017_81				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Active rodents on levee.					

No Photos

LM Start	1.89	Rating **	A/W	Issue No.	127
LM End	1.91	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.852300 °	37.852000 °
				-121.323700 °	-121.323600 °
DWR ID	DWR_RD0544_01_f _ 2017_127				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:569					
Site Designation:LMA-475					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_569\_4614.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.89	Rating **	A/W	Issue No.	127 (cont)
LM End	1.91	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.852300 °	37.852000 °
				-121.323700 °	-121.323600 °
DWR ID	DWR_RD0544_01_f_2017_127				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:569					
Site Designation:LMA-475					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 2 of 3 : LEVAL\_FA\_2018\_569\_4615.jpg



LM Start	<b>1.89</b>	Rating **	A/W	Issue No.	<b>127 (cont)</b>
LM End	<b>1.91</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_569\_4616.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.25	Rating **	M	Issue No.	82
LM End	2.25	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.848302 °	37.848302 °
				-121.324877 °	-121.324877 °
DWR ID	DWR_RD0544_01_s_2017_82				
Comment Code					
EQ : Equipment					
Inspector Comment					
Old irrigation pipe.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_82\_20180906\_00059.jpg



Looking southwest at old irrigation pipe on landward shoulder.

LM Start	2.25	Rating **	U	Issue No.	156	
LM End	2.25	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.848225 °	37.848225 °	
				-121.324868 °	-121.324868 °	
DWR ID	22650					
Comment Code						
Inspector Comment						
FS_ID:53362 DS_ID:22650 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Severe erosion on LS slope so crossing remains Urgent (D. Sanoski - DWR UCIP).12/22/2016: Erosion of LS slope along pipe alignment. (K. Fazel - UCIP)10/29/2013:Siphon breaker on the landward slope not found. It has been removed and pipe plugged.Huge levee slope erosion on landside.2-inch electric conduit on waterside, service pole on landside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 14-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump on a pile structure in the river. Steel walkway to the pump. 2-inch electrical conduit through the levee to the waterside (WS). Power pole on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005, pipe referenced as 5 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.26), pipe referenced as 5 feet below the crown]. FS Date: 10/2/2018 2:20:00 PM						

Photo 1 of 3 : UCIP\_FA\_2018\_53362\_42007.jpg



WS view: steel pipe, walkway to the pump, conduit (bottom left) on levee slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.25	Rating **	U	Issue No.	156 (cont)	
LM End	2.25	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.848225 °	37.848225 °	
				-121.324868 °	-121.324868 °	
DWR ID	22650					
Comment Code						
Inspector Comment						
FS_ID:53362 DS_ID:22650 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Severe erosion on LS slope so crossing remains Urgent (D. Sanoski - DWR UCIP).12/22/2016: Erosion of LS slope along pipe alignment. (K. Fazel - UCIP)10/29/2013:Siphon breaker on the landward slope not found. It has been removed and pipe plugged.Huge levee slope erosion on landside.2-inch electric conduit on waterside, service pole on landside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 14-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump on a pile structure in the river. Steel walkway to the pump. 2-inch electrical conduit through the levee to the waterside (WS). Power pole on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005, pipe referenced as 5 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.26), pipe referenced as 5 feet below the crown]. FS Date: 10/2/2018 2:20:00 PM						

LM Start	<b>2.25</b>	Rating **	U	Issue No.	<b>156 (cont)</b>
LM End	<b>2.25</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_53362\_42006.jpg



WS view: steel pipe, walkway to the pump, and pump on steel pile structure in the stream.

Photo 3 of 3 : UCIP\_FA\_2018\_53362\_42005.jpg



LS view: exposed pipe, concrete standpipe (left), service pole (top right) and eroded slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.25	Rating **	U	Issue No.	23
LM End	2.25	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.848198°	37.848198°
				-121.324802°	-121.324802°
DWR ID	DWR_RD0544_01_s_2012_23				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Caving/erosion around irrigation pipe on landside slope.					

Photo 1 of 3 : FA\_2018\_RD0544\_108\_23\_20180906\_00022.jpg



Looking south at erosion around irrigation pipe on landside slope. (Fall 2014)

LM Start	<b>2.25</b>	Rating **	U	Issue No.	<b>23 (cont)</b>
LM End	<b>2.25</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA\_2018\_RD0544\_108\_23\_20180906\_00023.jpg



Looking north at erosion under irrigation pipe on landside slope.

LM Start	<b>2.25</b>	Rating **	U	Issue No.	<b>23 (cont)</b>
LM End	<b>2.25</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA\_2018\_RD0544\_108\_23\_20180906\_00024.jpg



Looking east at erosion under irrigation pipe on landside slope.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.26	Rating **	U	Issue No.	157
LM End	2.26	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.848029 °	37.848029 °
				-121.324851 °	-121.324851 °
DWR ID	22652				
Comment Code					
Inspector Comment					
FS_ID:53363 DS_ID:22652 EP_NO: 13554 Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Significant erosion on LS slope and around pipe, also noticed significant erosion on WS slope so crossing remains as Urgent (D. Sanoski - DWR UCIP).12/22/2016: Depression (hole) in levee in two places on the WS slope in alignment with this pipe. One of the holes is due to rodent activity. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/29/2013:- levee slope erosion on landside.- needs cleaning of siphon breaker. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch coated steel drainage discharge pipe, 2 feet below the crown. Pump in a concrete standpipe in a drainage ditch at the landside (LS) toe. Siphon breaker in a steel riser on the waterside (WS). (Plans to install a 12-inch discharge pipe through the levee for removal of excess waters authorized under Permit No. 13554, 1982 - Lloyd Phelps Jr). [Additional Reference(s): DWR Levee Log, 2005, states that the pump is on a pier in the channel]. FS Date: 10/2/2018 2:34:00 PM					

LM Start	<b>2.26</b>	Rating **	U	Issue No.	<b>157 (cont)</b>
LM End	<b>2.26</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_53363\_44830.jpg



WS view: steel pipe immersed into the stream.

Photo 2 of 3 : UCIP\_FA\_2018\_53363\_44829.jpg



WS view: siphon breaker inside steel pipe riser (bottom) on levee slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.26	Rating **	U	Issue No.	157 (cont)	
LM End	2.26	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.848029 °	37.848029 °	
				-121.324851 °	-121.324851 °	
DWR ID	22652					
Comment Code						
Inspector Comment						
FS_ID:53363 DS_ID:22652 EP_NO: 13554 Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Significant erosion on LS slope and around pipe, also noticed significant erosion on WS slope so crossing remains as Urgent (D. Sanoski - DWR UCIP).12/22/2016: Depression (hole) in levee in two places on the WS slope in alignment with this pipe. One of the holes is due to rodent activity. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/29/2013:- levee slope erosion on landside.- needs cleaning of siphon breaker. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch coated steel drainage discharge pipe, 2 feet below the crown. Pump in a concrete standpipe in a drainage ditch at the landside (LS) toe. Siphon breaker in a steel riser on the waterside (WS). (Plans to install a 12-inch discharge pipe through the levee for removal of excess waters authorized under Permit No. 13554, 1982 - Lloyd Phelps Jr). [Additional Reference(s): DWR Levee Log, 2005, states that the pump is on a pier in the channel]. FS Date: 10/2/2018 2:34:00 PM						

Photo 3 of 3 : UCIP\_FA\_2018\_53363\_44828.jpg



WS view: siphon breaker inside steel pipe riser on levee slope. Needs dirt cleaning/clearing.

LM Start	2.26	Rating **	M	Issue No.	98
LM End	2.31	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.848021 °	37.847343 °
				-121.324839 °	-121.324672 °
DWR ID	DWR_RD0544_01_f_2014_98				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Untrimmed trees on landside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_98\_20180906\_00069.jpg



Looking south at untrimmed trees on landward slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.27	Rating **	U	Issue No.	44
LM End	2.27	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.847990 °	37.847990 °
				-121.324897 °	-121.324897 °
DWR ID	DWR_RD0544_01_f_2018_44				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
erosion around irrigation pipe on landward slope.					

Photo 1 of 3 : FA\_2018\_RD0544\_108\_44\_20180919\_00175.jpg



Looking southwest at erosion around irrigation pipe on landward slope. (Fall 2018)

LM Start	<b>2.27</b>	Rating **	U	Issue No.	<b>44 (cont)</b>
LM End	<b>2.27</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA\_2018\_RD0544\_108\_44\_20180919\_00174.jpg



Looking northwest at erosion around irrigation pipe on landward slope. (Fall 2018)

LM Start	<b>2.27</b>	Rating **	U	Issue No.	<b>44 (cont)</b>
LM End	<b>2.27</b>	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA\_2018\_RD0544\_108\_44\_20180919\_00176.jpg



Looking east at erosion around pipe. (Fall 2018)

* Location LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.27	Rating **	M	Issue No.	8
LM End	2.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.847973 °	37.847105 °
				-121.324820 °	-121.324577 °
DWR ID	DWR_RD0544_01_s_2012_8				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_8\_20180906\_00013.jpg



Looking southwest at several rodent holes on landward shoulder and slope.

LM Start	2.30	Rating **	A/W	Issue No.	90
LM End	2.30	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.847542 °	37.847542 °
				-121.324732 °	-121.324732 °
DWR ID	DWR_RD0544_01_s_2017_90				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Sinkhole forming in crown.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_90\_20180906\_00064.jpg



Looking at sinkhole on levee crown.

LM Start	2.31	Rating **	M	Issue No.	149
LM End	2.31	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.847327 °	37.847327 °
				-121.324663 °	-121.324663 °
DWR ID	DWR_RD0544_01_f_2017_149				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.31	Rating **	A/W	Issue No.	128
LM End	2.35	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.847300 °	37.846800 °
				-121.324700 °	-121.324400 °
DWR ID	DWR_RD0544_01_f_2017_128				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:568					
Site Designation:LMA-474					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_568\_4540.jpg



LM Start	<b>2.31</b>	Rating **	A/W	Issue No.	<b>128 (cont)</b>
LM End	<b>2.35</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_568\_4545.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.31	Rating **	A/W	Issue No.	128 (cont)
LM End	2.35	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.847300 °	37.846800 °
				-121.324700 °	-121.324400 °
DWR ID	DWR_RD0544_01_f _ 2017_128				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:568					
Site Designation:LMA-474					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 3 of 3 : LEVAL\_FA\_2018\_568\_4547.jpg



LM Start	2.32	Rating **	U	Issue No.	34
LM End	2.36	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.847292°	37.846743°
				-121.324662°	-121.324336°
DWR ID	DWR_RD0544_01_s_2012_34				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several rodent hole within this reach.					

Photo 1 of 3 : FA\_2018\_RD0544\_108\_34\_20180906\_00027.jpg



Looking east at large rodent hole on landward slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.38	Rating **	M	Issue No.	67
LM End	2.38	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.846508 °	37.846508 °
				-121.324103 °	-121.324103 °
DWR ID	DWR_RD0544_01_s_2013_67				
Comment Code					
BU : Building					
Inspector Comment					
Building has been in place for several years.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_67\_20180906\_00047.jpg



Looking southeast at building at landward toe.

LM Start	2.39	Rating **	M	Issue No.	50
LM End	2.39	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.846323 °	37.846323 °
				-121.323978 °	-121.323978 °
DWR ID	DWR_RD0544_01_f _ 2018_50				
Comment Code					
PR : Prunings					
Inspector Comment					

No Photos

LM Start	2.40	Rating **	U	Issue No.	68
LM End	2.40	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.846315 °	37.846315 °
				-121.323875 °	-121.323875 °
DWR ID	DWR_RD0544_01_s_2013_68				
Comment Code					
EQ : Equipment					
Inspector Comment					
Equipment on landside toe.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_68\_20180906\_00048.jpg



Looking west at equipment at landward toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.43	Rating **	U	Issue No.	91
LM End	2.43	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.845973 °	37.845973 °
				-121.323373 °	-121.323373 °
DWR ID	DWR_RD0544_01_s_2017_91				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Slope stability with depression in crown due to vehicle traffic.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_91\_20180906\_00065.jpg



Looking south at depression on levee crown and landward slope.

LM Start	2.43	Rating **	M	Issue No.	158
LM End	2.43	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.845968 °	37.845968 °
				-121.323357 °	-121.323357 °
DWR ID	22654				
Comment Code					
Inspector Comment					
FS_ID:46671					
DS_ID:22654					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: - soil around the siphon breaker eroded.					
FIELD_STRUCT_DESC: 8-inch drainage discharge pipe of an unknown material through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a drainage channel bank on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005].					
FS Date: 10/29/2013					

Photo 1 of 3 : UCIP\_FA\_2018\_46671\_44836.jpg



WS view: exposed steel pipe and siphon breaker on levee slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.43	Rating **	M	Issue No.	158 (cont)
LM End	2.43	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.845968 °	37.845968 °
				-121.323357 °	-121.323357 °
DWR ID	22654				
Comment Code					
Inspector Comment					
FS_ID:46671 DS_ID:22654 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - soil around the siphon breaker eroded. FIELD_STRUCT_DESC: 8-inch drainage discharge pipe of an unknown material through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS) slope. Pump on a drainage channel bank on the landside (LS). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/29/2013					

Photo 2 of 3 : UCIP\_FA\_2018\_46671\_44835.jpg



WS view: exposed steel pipe and soil erosion around siphon breaker on levee slope.

LM Start	<b>2.43</b>	Rating **	M	Issue No.	<b>158 (cont)</b>
LM End	<b>2.43</b>	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP\_FA\_2018\_46671\_44834.jpg



LS view: pump on drainage ditch bank about 140 ft from the levee.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>2.53</b>	Rating **	A/W	Issue No.	<b>129</b>
LM End	<b>2.56</b>	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		37.844900°	37.844500°	
			-121.322300°	-121.321900°	
DWR ID	DWR_RD0544_01_f_2017_129				

**Comment Code**

**Inspector Comment**

**Levee Evaluation Comments**

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No: 567

Site Designation: LMA-473

Repair Type: Erosion

Rating: Area of Concern

Field Date: 8/10/2017

Notes: large rodent holes observed on landside slope.

LM Start	<b>2.53</b>	Rating **	A/W	Issue No.	<b>129 (cont)</b>
LM End	<b>2.56</b>	Issue Type +	Ma	Location *	

Photo 1 of 3 : LEVAL\_FA\_2018\_567\_4552.jpg



Photo 2 of 3 : LEVAL\_FA\_2018\_567\_4554.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.53	Rating **	A/W	Issue No.	129 (cont)
LM End	2.56	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.844900 °	37.844500 °
				-121.322300 °	-121.321900 °
DWR ID	DWR_RD0544_01_f _ 2017_129				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:567					
Site Designation:LMA-473					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes: large rodent holes observed on landside slope.					

Photo 3 of 3 : LEVAL\_FA\_2018\_567\_4556.jpg



LM Start	2.53	Rating **	C	Issue No.	15
LM End	2.53	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.844880 °	37.844880 °
				-121.322212 °	-121.322212 °
DWR ID	DWR_RD0544_01_s_2018_15				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Large finger erosions on landward slope.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.54	Rating **	C	Issue No.	60
LM End	2.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.844765 °	37.844253 °
				-121.322143 °	-121.321850 °
DWR ID	DWR_RD0544_01_s_2012_60				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Finger erosion on landside slope.					

No Photos

LM Start	2.57	Rating **	M	Issue No.	159	
LM End	2.57	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.844386 °	37.844386 °	
				-121.321894 °	-121.321894 °	
DWR ID	22655					
Comment Code						
Inspector Comment						
FS_ID:51361 DS_ID:22655 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 12/22/2016: Erosion has been backfilled. Slope has been repaired but unclear if the source of the erosion (a possible leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:Siphon breaker on the landward shoulder not found.Service pole on landside.Huge erosion on landside and waterside of the levee due to the pipe leakage. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump mounted on a pile structure in the river. Steel walkway to the pump. Air relief valve on the waterside (WS) shoulder. Concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.58), 16-inch pipe, 12 feet below the crown, referenced]. FS Date: 12/22/2016						

Photo 1 of 3 : UCIP\_FA\_2018\_51361\_44839.jpg



WS view: exposed pipe, walkway to pump, and pump on pile structure in the stream.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.57	Rating **	M	Issue No.	159 (cont)	
LM End	2.57	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.844386 °	37.844386 °	
				-121.321894 °	-121.321894 °	
DWR ID	22655					
Comment Code						
Inspector Comment						
FS_ID:51361 DS_ID:22655 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 12/22/2016: Erosion has been backfilled. Slope has been repaired but unclear if the source of the erosion (a possible leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:Siphon breaker on the landward shoulder not found.Service pole on landside.Huge erosion on landside and waterside of the levee due to the pipe leakage. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 2 feet below the crown. Pump mounted on a pile structure in the river. Steel walkway to the pump. Air relief valve on the waterside (WS) shoulder. Concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.58), 16-inch pipe, 12 feet below the crown, referenced]. FS Date: 12/22/2016						

LM Start	<b>2.57</b>	Rating **	M	Issue No.	<b>159 (cont)</b>
LM End	<b>2.57</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_51361\_44838.jpg



WS view: exposed pipe, air relief valve, and huge erosion on levee slope.

Photo 3 of 3 : UCIP\_FA\_2018\_51361\_44837.jpg



WS view: walkway to pump and pump on pile structure in the stream.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.84	Rating **	N	Issue No.	22
LM End	2.84	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.841075 °	37.841075 °
				-121.320205 °	-121.320205 °
DWR ID	DWR_RD0544_01_s_2012_22				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					

No Photos

LM Start	2.87	Rating **	M	Issue No.	69
LM End	2.87	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.841032 °	37.841032 °
				-121.319748 °	-121.319748 °
DWR ID	DWR_RD0544_01_s_2013_69				
Comment Code					
RA : Ramp					
Inspector Comment					
Unauthorized ramp on waterside slope.					

No Photos

LM Start	2.89	Rating **	U	Issue No.	106
LM End	3.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.840952 °	37.837588 °
				-121.319327 °	-121.317540 °
DWR ID	DWR_RD0544_01_s_2015_106				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense willows and vegetation on waterside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_106\_20180906\_00073.jpg



Looking southeast at dense willows (veg) on waterward slope and toe fall 2015.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.95	Rating **	M	Issue No.	107
LM End	2.96	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.840560°	37.840467°
				-121.318463°	-121.318367°
DWR ID	DWR_RD0544_01_s_2015_107				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Several depressions on landside slope within this reach.					

Photo 1 of 2 : FA\_2018\_RD0544\_108\_107\_20180906\_00074.jpg



Looking south at depression on landward slope.

LM Start	<b>2.95</b>	Rating **	M	Issue No.	<b>107 (cont)</b>
LM End	<b>2.96</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA\_2018\_RD0544\_108\_107\_20180906\_00075.jpg



Looking west at depression on landward shoulder.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.95	Rating **	M	Issue No.	5
LM End	2.95	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.840697 °	37.840697 °
				-121.318252 °	-121.318252 °
DWR ID	RD0544U01RM49.67				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: Pump has been removed. A larger pocket erosion has been found at the erosion site.					
08/07/2012: The erosion is immediately upstream of a river bend.					
Dense vegetation is visible at the erosion site. [2017 Site ID:RD0544U01RM49.67]					

Photo 1 of 3 : FA\_2018\_RD0544\_108\_5\_20180906\_00010.jpg



Front view of the erosion.

LM Start	<b>2.95</b>	Rating **	M	Issue No.	<b>5 (cont)</b>
LM End	<b>2.95</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA\_2018\_RD0544\_108\_5\_20180906\_00011.jpg



Front view of the erosion.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.95	Rating **	M	Issue No.	5 (cont)	
LM End	2.95	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.840697 °		37.840697 °
				-121.318252 °		-121.318252 °
DWR ID	RD0544U01RM49.67					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: Pump has been removed. A larger pocket erosion has been found at the erosion site.						
08/07/2012: The erosion is immediately upstream of a river bend.						
Dense vegetation is visible at the erosion site. [2017 Site ID:RD0544U01RM49.67]						

Photo 3 of 3 : FA\_2018\_RD0544\_108\_5\_20180906\_00012.jpg



Downstream view of the site.

LM Start	2.95	Rating **	M	Issue No.	47
LM End	3.19	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.840485 °	37.837225 °
				-121.318390 °	-121.317408 °
DWR ID	DWR_RD0544_01_s_2012_47				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_47\_20180906\_00036.jpg



Looking south at dense veg on landward slope fall 2015.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>2.98</b>	Rating **	C	Issue No.	<b>151</b>
LM End	<b>3.18</b>	Issue Type +	Ma	Location *	CR
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		37.840184 °	37.837294 °	
			-121.318192 °	-121.317420 °	
DWR ID	DWR_RD0544_01_f_2017_151				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	<b>3.07</b>	Rating **	A/W	Issue No.	<b>130</b>
LM End		Issue Type +	Ob	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		37.838880 °		
			-121.318210 °		
DWR ID	DWR_RD0544_01_f_2017_130				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:94					
Site Designation:189-16					
Repair Type: Seepage					
Rating:					
Field Date:					
Notes:					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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# Reclamation District No. 0544 Upper Roberts Island

No Photos

Looking east at slope damage on waterward slope.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.16	Rating **	M	Issue No.	160
LM End	3.16	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.837556 °	37.837556 °
				-121.317523 °	-121.317523 °
DWR ID	22656				
Comment Code					
Inspector Comment					
FS_ID:51365 DS_ID:22656 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 12/22/2016: Giant pit in LS slope has been backfilled, though no permit uncovered for this work. Unclear whether original source of damage (likely a leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:- huge levee slope erosion on landside. Walkway to distro box on LS toe in poor structural condition.- 1-inch electric conduit, power pole on landside.- not clear whether this is a irrigation or drainage pipe. (P. Amatya - DWR) FIELD_STRUCT_DESC: 1 of 2: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Slide gate in a 6-foot by 6-foot concrete distribution box at the landside (LS) toe. 1-inch electrical conduit through the levee. Power pole at the LS toe. Pump house on the waterside (WS) slope, but no pump attached as per the 2013 inspection. Flow meter on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.19)]. FS Date: 12/22/2016					

LM Start	<b>3.16</b>	Rating **	M	Issue No.	<b>160 (cont)</b>
LM End	<b>3.16</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_51365\_42207.jpg



WS view: exposed steel pipes, levee slope, and pumphouse for 2nd pipe.

Photo 2 of 3 : UCIP\_FA\_2018\_51365\_42206.jpg



WS view: exposed steel pipes on levee slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.16	Rating **	M	Issue No.	160 (cont)	
LM End	3.16	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.837556°	37.837556°	
				-121.317523°	-121.317523°	
DWR ID	22656					
Comment Code						
Inspector Comment						
FS_ID:51365 DS_ID:22656 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 12/22/2016: Giant pit in LS slope has been backfilled, though no permit uncovered for this work. Unclear whether original source of damage (likely a leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:- huge levee slope erosion on landside. Walkway to distro box on LS toe in poor structural condition.- 1-inch electric conduit, power pole on landside.- not clear whether this is a irrigation or drainage pipe. (P. Amatya - DWR) FIELD_STRUCT_DESC: 1 of 2: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Slide gate in a 6-foot by 6-foot concrete distribution box at the landside (LS) toe. 1-inch electrical conduit through the levee. Power pole at the LS toe. Pump house on the waterside (WS) slope, but no pump attached as per the 2013 inspection. Flow meter on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.19)]. FS Date: 12/22/2016						

Photo 3 of 3 : UCIP\_FA\_2018\_51365\_42205.jpg



WS view: exposed steel pipe immersed into the stream. No pump attached.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.17	Rating **	M	Issue No.	161
LM End	3.17	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.837544 °	37.837544 °
				-121.317517 °	-121.317517 °
DWR ID	22681				
Comment Code					
Inspector Comment					
FS_ID:51366 DS_ID:22681 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 12/22/2016: Giant pit in LS slope has been backfilled, though no permit uncovered for this work. Unclear whether original source of damage (likely a leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:Huge erosion and levee damage on landside slope due to the leaky pipe. Walkway to distro box on LS toe in poor structural condition. (P. Amatya - DWR) FIELD_STRUCT_DESC: 2 of 2: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Slide gate in a 6-foot by 6-foot concrete distribution box at the landside (LS) toe. 1-inch electrical conduit through the levee. Power pole at the LS toe. Pump house on the waterside (WS) slope, but no pump attached as per the 2013 inspection. Flow meter on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.19)]. FS Date: 12/22/2016					

LM Start	<b>3.17</b>	Rating **	M	Issue No.	<b>161 (cont)</b>
LM End	<b>3.17</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_51366\_44845.jpg



WS view: exposed steel pipes, levee slope, and pumphouse.

Photo 2 of 3 : UCIP\_FA\_2018\_51366\_44844.jpg



WS view: pipe daylights on levee slope. Siphon breaker removed and plugged.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.17	Rating **	M	Issue No.	161 (cont)	
LM End	3.17	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.837544 °	37.837544 °	
				-121.317517 °	-121.317517 °	
DWR ID	22681					
Comment Code						
Inspector Comment						
FS_ID:51366						
DS_ID:22681						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: 12/22/2016: Giant pit in LS slope has been backfilled, though no permit uncovered for this work. Unclear whether original source of damage (likely a leak in pipe) was addressed. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)10/29/2013:Huge erosion and levee damage on landside slope due to the leaky pipe. Walkway to distro box on LS toe in poor structural condition. (P. Amatya - DWR)						
FIELD_STRUCT_DESC: 2 of 2: 14-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Slide gate in a 6-foot by 6-foot concrete distribution box at the landside (LS) toe. 1-inch electrical conduit through the levee. Power pole at the LS toe. Pump house on the waterside (WS) slope, but no pump attached as per the 2013 inspection. Flow meter on the WS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.19)].						
FS Date: 12/22/2016						

Photo 3 of 3 : UCIP\_FA\_2018\_51366\_44843.jpg



WS view: exposed steel pipe (right) with flow meter near pumphouse.

LM Start	3.17	Rating **	M	Issue No.	62
LM End	3.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.837530 °	37.837530 °
				-121.317510 °	-121.317510 °
DWR ID	DWR_RD0544_01_s_2012_62				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Slope damage due to foot traffic.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_62\_20180906\_00043.jpg



Looking east at slope damaged by foot traffic near pump house on waterside of levee.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.21	Rating **	A/W	Issue No.	131
LM End	3.22	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.836900 °	37.836700 °
				-121.317300 °	-121.317300 °
DWR ID	DWR_RD0544_01_f_2017_131				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:566					
Site Designation:LMA-472					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_566\_4714.jpg



LM Start	<b>3.21</b>	Rating **	A/W	Issue No.	<b>131 (cont)</b>
LM End	<b>3.22</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_566\_4717.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.21	Rating **	A/W	Issue No.	131 (cont)	
LM End	3.22	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.836900 °	37.836700 °	
				-121.317300 °	-121.317300 °	
DWR ID	DWR_RD0544_01_f_2017_131					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:566						
Site Designation:LMA-472						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/10/2017						
Notes:						

Photo 3 of 3 : LEVAL\_FA\_2018\_566\_4722.jpg



LM Start	3.22	Rating **	U	Issue No.	49
LM End	3.84	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.836763°	37.829195°
				-121.317307°	-121.311918°
DWR ID	DWR_RD0544_01_s_2012_49				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation on waterside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_49\_20180906\_00038.jpg



Looking northeast at dense veg on waterward slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.23	Rating **	U	Issue No.	48
LM End	3.26	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.836615 °	37.836133 °
				-121.317285 °	-121.317153 °
DWR ID	DWR_RD0544_01_s_2012_48				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_48\_20180906\_00037.jpg



Looking south at typical view of dense veg on landward slope.

LM Start	3.28	Rating **	M	Issue No.	37
LM End	3.28	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.835951 °	37.835951 °
				-121.317062 °	-121.317062 °
DWR ID	DWR_RD0544_01_s_2012_37				
Comment Code					
RA : Ramp					
Inspector Comment					
Landowner has cut new ramp on waterside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_37\_20180906\_00030.jpg



Looking north at ramp on waterward slope.

LM Start	3.48	Rating **	M	Issue No.	56
LM End	3.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.833583 °	37.833583 °
				-121.314968 °	-121.314968 °
DWR ID	DWR_RD0544_01_s_2012_56				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.49	Rating **	A/W	Issue No.	162	
LM End	3.49	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			37.833475 °	37.833475 °	
				-121.314822 °	-121.314822 °	
DWR ID	22658					
Comment Code						
Inspector Comment						
FS_ID:24892						
DS_ID:22658						
EP_NO: N/A						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: - pipe on channel bank looks comparatively new.- pump approximately 500 ft. from the levee center on landside in drainage ditch.- a tall concrete standpipe and service pole near the pump.						
FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump and concrete standpipe in a drainage ditch on the landside (LS). Air vent on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.53)].						
FS Date: 10/29/2013						

LM Start	<b>3.49</b>	Rating **	A/W	Issue No.	<b>162 (cont)</b>
LM End	<b>3.49</b>	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_24892\_44853.jpg



WS view: exposed steel pipe on bank of the channel.

Photo 2 of 3 : UCIP\_FA\_2018\_24892\_44852.jpg



WS view: exposed steel pipe and air vent on the pipe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.49	Rating **	A/W	Issue No.	162 (cont)	
LM End	3.49	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			37.833475 °	37.833475 °	
				-121.314822 °	-121.314822 °	
DWR ID	22658					
Comment Code						
Inspector Comment						
FS_ID:24892 DS_ID:22658 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: - pipe on channel bank looks comparatively new.- pump approximately 500 ft. from the levee center on landside in drainage ditch.- a tall concrete standpipe and service pole near the pump. FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump and concrete standpipe in a drainage ditch on the landside (LS). Air vent on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.53)]. FS Date: 10/29/2013						

Photo 3 of 3 : UCIP\_FA\_2018\_24892\_44851.jpg



LS view: service pole, pump, and a concrete standpipe on bank of drainage ditch about 500 ft from the levee.

LM Start	3.49	Rating **	U	Issue No.	51
LM End	4.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.833432 °	37.821853 °
				-121.314792 °	-121.319992 °
DWR ID	DWR_RD0544_01_s_2012_51				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_51\_20180906\_00039.jpg



Looking southeast at the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.65	Rating **	A/W	Issue No.	132
LM End	3.67	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.831800 °	37.831600 °
				-121.312700 °	-121.312600 °
DWR ID	DWR_RD0544_01_f_2017_132				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:565					
Site Designation:LMA-471					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/11/2017					
Notes: dense shrubs on levee slope					

Photo 1 of 3 : LEVAL\_FA\_2018\_565\_4739.jpg



LM Start	<b>3.65</b>	Rating **	A/W	Issue No.	<b>132 (cont)</b>
LM End	<b>3.67</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_565\_4741.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>3.65</b>	Rating **	A/W	Issue No.	<b>132 (cont)</b>
LM End	<b>3.67</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.831800°	37.831600°
				-121.312700°	-121.312600°
DWR ID	DWR_RD0544_01_f_2017_132				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 565</p> <p>Site Designation: LMA-471</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/11/2017</p> <p>Notes: dense shrubs on levee slope</p>					

Photo 3 of 3 : LEVAL\_FA\_2018\_565\_4745.jpg



LM Start	<b>3.69</b>	Rating **	A/W	Issue No.	<b>133</b>
LM End	<b>3.73</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.831300°	37.830700°
				-121.312600°	-121.312300°
DWR ID	DWR_RD0544_01_f_2017_133				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 564</p> <p>Site Designation: LMA-470</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/11/2017</p> <p>Notes: big rodent holes on levee slopes</p>					

Photo 1 of 3 : LEVAL\_FA\_2018\_564\_4748.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.69	Rating **	A/W	Issue No.	133 (cont)	
LM End	3.73	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.831300 °	37.830700 °	
				-121.312600 °	-121.312300 °	
DWR ID	DWR_RD0544_01_f_2017_133					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:564						
Site Designation:LMA-470						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/11/2017						
Notes: big rodent holes on levee slopes						

Photo 2 of 3 : LEVAL\_FA\_2018\_564\_4750.jpg



LM Start	<b>3.69</b>	Rating **	A/W	Issue No.	<b>133 (cont)</b>
LM End	<b>3.73</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_564\_4756.jpg

**\* Location**

LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.76	Rating **	M	Issue No.	109
LM End	3.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.830250°	37.828013°
				-121.312323°	-121.311467°
DWR ID	DWR_RD0544_01_s_2015_109				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	3.79	Rating **	A/W	Issue No.	134
LM End	3.81	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.829800 °	37.829600 °
				-121.312100 °	-121.312100 °
DWR ID	DWR_RD0544_01_f _ 2017_134				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:563					
Site Designation:LMA-469					
Repair Type: Erosion					
Rating:Serious					
Field Date:8/11/2017					
Notes: site combined with LMA-468;see LMA-468 for details.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

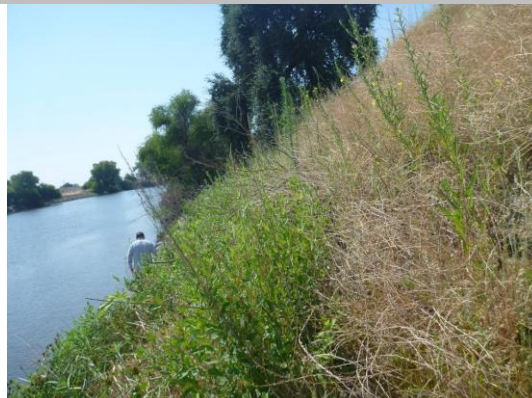
**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.81	Rating **	A/W	Issue No.	135
LM End	3.82	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.829600 °	37.829400 °
				-121.312000 °	-121.312000 °
DWR ID	DWR_RD0544_01_f_2017_135				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:562					
Site Designation:LMA-468					
Repair Type: Erosion					
Rating:Serious					
Field Date:8/11/2017					
Notes: Site combined with LMA-469;					

Photo 1 of 3 : LEVAL\_FA\_2018\_562\_4770.jpg



LM Start	<b>3.81</b>	Rating **	A/W	Issue No.	<b>135 (cont)</b>
LM End	<b>3.82</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_562\_4835.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.81	Rating **	A/W	Issue No.	135 (cont)
LM End	3.82	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.829600 °	37.829400 °
				-121.312000 °	-121.312000 °
DWR ID	DWR_RD0544_01_f _ 2017_135				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:562					
Site Designation:LMA-468					
Repair Type: Erosion					
Rating:Serious					
Field Date:8/11/2017					
Notes: Site combined with LMA-469;					

Photo 3 of 3 : LEVAL\_FA\_2018\_562\_4836.jpg



LM Start	3.92	Rating **	U	Issue No.	11
LM End	4.05	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.828078 °	37.826315 °
				-121.311483 °	-121.311024 °
DWR ID	DWR_RD0544_01_s_2012_11				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Large rodent holes on waterside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_11\_20180906\_00017.jpg



Looking at large rodent holes on waterward slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.97	Rating **	M	Issue No.	24
LM End	3.97	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.827360 °	37.827360 °
				-121.311067 °	-121.311067 °
DWR ID	DWR_RD0544_01_s_2015_24				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	4.25	Rating **	U	Issue No.	120
LM End	4.28	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.825482 °	37.825229 °
				-121.314298 °	-121.314771 °
DWR ID	DWR_RD0544_01_f_2015_120				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Several untrimmed trees on landside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_120\_20180906\_00088.jpg



Looking southwest at untrimmed trees on landward slope.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.29	Rating **	M	Issue No.	163
LM End	4.29	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.825071 °	37.825071 °
				-121.314932 °	-121.314932 °
DWR ID	22660				
Comment Code					
Inspector Comment					
FS_ID:24893 DS_ID:22660 EP_NO: 11536 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - siphon breaker was removed from CMP riser on landside shoulder. Needs replacement.- some details about existing pipes available in new Application no. 18903.- electric control box on landside and conduit on waterside. FIELD_STRUCT_DESC: 1 of 3: 12-inch coated steel irrigation discharge pipe through the levee, 3 feet below the crown. Pump on a pumping platform in the river with a walkway from the waterside (WS) slope. Siphon breaker in a corrugated metal pipe (CMP) riser and a concrete standpipe on the landside (LS). (Plans to install a platform and two irrigation pumps with two irrigation pipes and a drainage pipe through the levee, replacing an existing pump and irrigation pipe, authorized under Permit No. 11536, 1976 - Lloyd L. Phelps Sr). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.33), pipe referenced as 8 feet below the crown]. FS Date: 10/29/2013					

LM Start	<b>4.29</b>	Rating **	M	Issue No.	<b>163 (cont)</b>
LM End	<b>4.29</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_24893\_44858.jpg



WS view: pipes, pumps, walkway to pump, and pile structure in the stream.

Photo 2 of 3 : UCIP\_FA\_2018\_24893\_44857.jpg



WS view: pumps, walkway to pump, and pile structure in the stream.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.29	Rating **	M	Issue No.	163 (cont)	
LM End	4.29	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.825071 °	37.825071 °	
				-121.314932 °	-121.314932 °	
DWR ID	22660					
Comment Code						
Inspector Comment						
FS_ID:24893 DS_ID:22660 EP_NO: 11536 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - siphon breaker was removed from CMP riser on landside shoulder. Needs replacement.- some details about existing pipes available in new Application no. 18903.- electric control box on landside and conduit on waterside. FIELD_STRUCT_DESC: 1 of 3: 12-inch coated steel irrigation discharge pipe through the levee, 3 feet below the crown. Pump on a pumping platform in the river with a walkway from the waterside (WS) slope. Siphon breaker in a corrugated metal pipe (CMP) riser and a concrete standpipe on the landside (LS). (Plans to install a platform and two irrigation pumps with two irrigation pipes and a drainage pipe through the levee, replacing an existing pump and irrigation pipe, authorized under Permit No. 11536, 1976 - Lloyd L. Phelps Sr). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.33), pipe referenced as 8 feet below the crown]. FS Date: 10/29/2013						

Photo 3 of 3 : UCIP\_FA\_2018\_24893\_44856.jpg



LS view: CMP riser (top- for 12" pipe), CMP riser (bottom- for 16" pipe), and capped steel pipe (left)

LM Start	4.30	Rating **	M	Issue No.	59
LM End	4.30	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.824943 °	37.824943 °
				-121.315008 °	-121.315008 °
DWR ID	DWR_RD0544_01_s_2012_59				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.34	Rating **	C	Issue No.	100
LM End	4.34	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.824373 °	37.824373 °
				-121.315207 °	-121.315207 °
DWR ID	DWR_RD0544_01_s_2017_100				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Broken tree limbs and branches on waterside slope.					

No Photos

LM Start	4.36	Rating **	M	Issue No.	102
LM End	4.42	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.824170 °	37.823494 °
				-121.315223 °	-121.315792 °
DWR ID	DWR_RD0544_01_f_2017_102				
Comment Code					
C3 : Add appropriate gravel or road base. Grade and compact.					
Inspector Comment					

No Photos

LM Start	4.41	Rating **	U	Issue No.	117
LM End	4.79	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.823522 °	37.820557 °
				-121.315735 °	-121.321217 °
DWR ID	DWR_RD0544_01_s_2017_117				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 2 : FA\_2018\_RD0544\_108\_117\_20180906\_00082.jpg



Looking southwest at the waterside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.41	Rating **	U	Issue No.	117 (cont)	
LM End	4.79	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.823522 °		37.820557 °
				-121.315735 °		-121.321217 °
DWR ID	DWR_RD0544_01_s_2017_117					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						

Photo 2 of 2 : FA\_2018\_RD0544\_108\_117\_20180906\_00083.jpg



Looking south at dense veg on waterward slope.

LM Start	4.46	Rating **	A/W	Issue No.	136
LM End	4.48	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.823200 °	37.823000 °
				-121.316400 °	-121.316800 °
DWR ID	DWR_RD0544_01_f_2017_136				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:561					
Site Designation:LMA-467					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/11/2017					
Notes: site combined with LMA-466 in field; length and coordinates redefined in field.					

Photo 1 of 3 : LEVAL\_FA\_2018\_561\_4862.jpg



\* **Location**  
 LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

\*\* **Rating**  
 A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ **Issue Type**  
 Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.46	Rating **	A/W	Issue No.	136 (cont)	
LM End	4.48	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.823200 °	37.823000 °	
				-121.316400 °	-121.316800 °	
DWR ID	DWR_RD0544_01_f_2017_136					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:561						
Site Designation:LMA-467						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/11/2017						
Notes: site combined with LMA-466 in field; length and coordinates redefined in field.						

Photo 2 of 3 : LEVAL\_FA\_2018\_561\_4866.jpg



LM Start	<b>4.46</b>	Rating **	A/W	Issue No.	<b>136 (cont)</b>
LM End	<b>4.48</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_561\_4867.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>4.48</b>	Rating **	A/W	Issue No.	<b>138</b>
LM End	<b>4.48</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.823000°	37.823000°
				-121.316700°	-121.316800°
DWR ID	DWR_RD0544_01_f_2017_138				
Comment Code					
Inspector Comment					
Levee Evaluation Comments Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage. Site ID No: 560 Site Designation: LMA-466 Repair Type: Erosion Rating: Area of Concern Field Date: 8/11/2017 Notes: site combined with LMA-467 in field; see LMA-467 for details.					

No Photos

LM Start	<b>4.48</b>	Rating **	M	Issue No.	<b>103</b>
LM End	<b>4.48</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.823027°	37.823027°
				-121.316737°	-121.316737°
DWR ID	DWR_RD0544_01_f_2014_103				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.49	Rating **	U	Issue No.	41
LM End	4.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.822934 °	37.822934 °
				-121.316870 °	-121.316870 °
DWR ID	DWR_RD0544_01_s_2012_41				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	4.64	Rating **	U	Issue No.	104
LM End	4.68	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.822033 °	37.821826 °
				-121.319432 °	-121.320071 °
DWR ID	DWR_RD0544_01_f_2014_104				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Dense untrimmed trees on landside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_104\_20180906\_00071.jpg



Looking southwest at dense untrimmed trees on landward slope fall 2015.

LM Start	4.68	Rating **	U	Issue No.	27
LM End	4.69	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.821847 °	37.821793 °
				-121.320027 °	-121.320188 °
DWR ID	DWR_RD0544_01_s_2012_27				
Comment Code					
GA : Garbage					
Inspector Comment					
Tires stock pile on landside toe.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_27\_20180906\_00025.jpg



Looking west at tires stock pile on landward berm.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

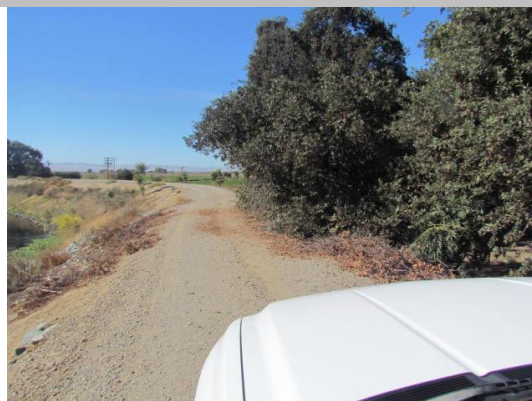
**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.69	Rating **	U	Issue No.	105
LM End	4.69	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.821775 °	37.821775 °
				-121.320203 °	-121.320203 °
DWR ID	DWR_RD0544_01_f_2014_105				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Tree has overgrown onto levee crown.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_105\_20180906\_00072.jpg



Looking south at overgrown tree on landward shoulder.

LM Start	4.69	Rating **	M	Issue No.	111
LM End	4.69	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.821783 °	37.821783 °
				-121.320237 °	-121.320237 °
DWR ID	DWR_RD0544_01_s_2015_111				
Comment Code					
PR : Prunings					
Inspector Comment					
Prunings on landside shoulder.					

No Photos

LM Start	4.71	Rating **	A/W	Issue No.	29	
LM End	4.71	Issue Type +	Ma	Location *	CR	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.821626 °		37.821626 °
				-121.320471 °		-121.320471 °
DWR ID	DWR_RD0544_01_s_2012_29					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
District has employed a rodent control program and grouted holes.						

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.71	Rating **	M	Issue No.	26
LM End	4.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.821592 °	37.821253 °
				-121.320617 °	-121.320927 °
DWR ID	DWR_RD0544_01_s_2012_26				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	4.74	Rating **	U	Issue No.	83
LM End	4.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.821287 °	37.821287 °
				-121.320897 °	-121.320897 °
DWR ID	DWR_RD0544_01_f _ 2016_83				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Large rodent hole on waterside shoulder.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_83\_20180906\_00060.jpg



Looking at large rodent hole on landward slope.

LM Start	4.75	Rating **	M	Issue No.	45
LM End	4.75	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.821177 °	37.821177 °
				-121.321013 °	-121.321013 °
DWR ID	DWR_RD0544_01_s_2012_45				
Comment Code					
BU : Building					
Inspector Comment					
New unauthorized pump shed on landside toe.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_45\_20180906\_00035.jpg



Looking west at a unauthorized pump house on landside toe.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.75	Rating **	U	Issue No.	164	
LM End	4.75	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.821153°	37.821153°	
				-121.320995°	-121.320995°	
DWR ID	22661					
Comment Code						
Inspector Comment						
FS_ID:53364 DS_ID:22661 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Same as last inspection; LS slope shows both signs of erosion and a hole above the pipe so crossing remains Urgent (D. Sanoski - DWR UCIP).12/22/2016: LS slope still eroded and in need of repair. WS slope shows no signs of problems. (K. Fazel - UCIP)10/31/2013:- huge erosion on landside slope due to leaky pipe.- small depression on waterside slope. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 4.4 feet below the crown. Pump house on the landside (LS) slope. Newly installed pump with a shutoff valve on the waterside (WS) slope. Pressure relief valve on the LS slope. Concrete distribution box with a shutoff valve on the pipe at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.79), 14-inch pipe, 12 feet below the crown, referenced]. FS Date: 10/2/2018 3:22:00 PM						

LM Start	<b>4.75</b>	Rating **	U	Issue No.	<b>164 (cont)</b>
LM End	<b>4.75</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_53364\_44864.jpg



WS view: exposed steel pipe on levee slope.

Photo 2 of 3 : UCIP\_FA\_2018\_53364\_44863.jpg



WS view: exposed steel pipe and a small depression on levee slope.  
May be due to leaky pipe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

FS\_ID:53364  
DS\_ID:22661  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 10/2/2018 Same as last inspection; LS slope shows both signs of erosion and a hole above the pipe so crossing remains Urgent (D. Sanoski - DWR UCIP).12/22/2016: LS slope still eroded and in need of repair. WS slope shows no signs of problems. (K. Fazel - UCIP)10/31/2013:- huge erosion on landside slope due to leaky pipe.- small depression on waterside slope. (P. Amatya - DWR)  
FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 4.4 feet below the crown. Pump house on the landside (LS) slope. Newly installed pump with a shutoff valve on the waterside (WS) slope. Pressure relief valve on the LS slope. Concrete distribution box with a shutoff valve on the pipe at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.79), 14-inch pipe, 12 feet below the crown, referenced].  
FS Date: 10/2/2018 3:22:00 PM



LS view: distribution box (top-left), pumphouse (right) and exposed leaky pipe on eroded levee slope.



Looking southwest at dense trees on landward slope and toe.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable	A : Acceptable                      N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable            C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable                      A/W : Acceptable but Monitor & Maintain	En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.77	Rating **	U	Issue No.	113
LM End	4.77	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.820828 °	37.820828 °
				-121.321193 °	-121.321193 °
DWR ID	DWR_RD0544_01_s_2015_113				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Large hole, possibly a rodent hole, on waterside slope.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_113\_20180906\_00078.jpg



Looking north at large hole on waterward slope.

LM Start	4.78	Rating **	M	Issue No.	165	
LM End	4.78	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.820691 °	37.820691 °	
				-121.321159 °	-121.321159 °	
DWR ID	22662					
Comment Code						
Inspector Comment						
FS_ID:42962 DS_ID:22662 EP_NO: 1738 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. No handle on gatevalve on WS slope. FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 6 feet below the crown. Slant pump and gate valve on the waterside (WS) slope. Electrical conduit through the levee and on the landside (LS). Service pole on the LS. Two concrete standpipes on the LS. (Plans for the construction of a pipeline through the levee authorized under Permit No. 1738, 1953 - Barker Corporation). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.82)]. FS Date: 10/31/2013						

Photo 1 of 3 : UCIP\_FA\_2018\_42962\_42877.jpg



WS view: slant pump on steel framed support, gate valve, and headwall on levee slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.78	Rating **	M	Issue No.	165 (cont)	
LM End	4.78	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.820691 °	37.820691 °	
				-121.321159 °	-121.321159 °	
DWR ID	22662					
Comment Code						
Inspector Comment						
FS_ID:42962 DS_ID:22662 EP_NO: 1738 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. No handle on gatevalve on WS slope. FIELD_STRUCT_DESC: 12-inch steel irrigation discharge pipe through the levee, 6 feet below the crown. Slant pump and gate valve on the waterside (WS) slope. Electrical conduit through the levee and on the landside (LS). Service pole on the LS. Two concrete standpipes on the LS. (Plans for the construction of a pipeline through the levee authorized under Permit No. 1738, 1953 - Barker Corporation). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.82)]. FS Date: 10/31/2013						

LM Start	<b>4.78</b>	Rating **	M	Issue No.	<b>165 (cont)</b>
LM End	<b>4.78</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_42962\_42876.jpg



WS view: gate valve without handwheel on levee slope.

Photo 3 of 3 : UCIP\_FA\_2018\_42962\_42875.jpg



LS view: two concrete standpipes and abandoned pump on levee slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.80	Rating **	U	Issue No.	52
LM End	4.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.820472°	37.820472°
				-121.321190°	-121.321190°
DWR ID	DWR_RD0544_01_f_2018_52				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_52\_20180919\_00178.jpg



Looking west at large pruning pile at landward toe. (Fall 2018)

LM Start	4.80	Rating **	M	Issue No.	28
LM End	4.80	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.820412 °	37.820412 °
				-121.321193 °	-121.321193 °
DWR ID	DWR_RD0544_01_s_2017_28				
Comment Code					
PI : Pipe					
Inspector Comment					
Pipe installed near surface of crown. Pipe is not connected on either side.					

Photo 1 of 1 : FA\_2018\_RD0544\_108\_28\_20180906\_00026.jpg



Looking south at pipe across levee crown.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	4.97	Rating **	A/W	Issue No.	139
LM End	4.99	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.818600 °	37.818400 °
				-121.319200 °	-121.319000 °
DWR ID	DWR_RD0544_01_f_2017_139				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:559					
Site Designation:LMA-465					
Repair Type: Erosion					
Rating:Serious					
Field Date:8/11/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_559\_4887.jpg



LM Start	<b>4.97</b>	Rating **	A/W	Issue No.	<b>139 (cont)</b>
LM End	<b>4.99</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_559\_4892.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>4.97</b>	Rating **	A/W	Issue No.	<b>139 (cont)</b>
LM End	<b>4.99</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.818600°	37.818400°
				-121.319200°	-121.319000°
DWR ID	DWR_RD0544_01_f_2017_139				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 559</p> <p>Site Designation: LMA-465</p> <p>Repair Type: Erosion</p> <p>Rating: Serious</p> <p>Field Date: 8/11/2017</p> <p>Notes:</p>					

Photo 3 of 3 : LEVAL\_FA\_2018\_559\_4894.jpg



LM Start	<b>5.02</b>	Rating **	M	Issue No.	<b>125</b>
LM End	<b>5.02</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.817942°	37.817942°
				-121.319118°	-121.319118°
DWR ID	DWR_RD0544_01_s_2017_125				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	5.32	Rating **	A/W	Issue No.	140 (cont)	
LM End	5.36	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.813900 °	37.813500 °	
				-121.319900 °	-121.319400 °	
DWR ID	DWR_RD0544_01_f_2017_140					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:558						
Site Designation:LMA-464						
Repair Type: Erosion						
Rating:Serious						
Field Date:8/16/2017						
Notes:						

Photo 2 of 3 : LEVAL\_FA\_2018\_558\_4904.jpg



LM Start	<b>5.32</b>	Rating **	A/W	Issue No.	<b>140 (cont)</b>
LM End	<b>5.36</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_558\_4910.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	5.36	Rating **	A/W	Issue No.	141
LM End	5.37	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.813400 °	37.813300 °
				-121.319300 °	-121.319200 °
DWR ID	DWR_RD0544_01_f_2017_141				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:557					
Site Designation:LMA-463					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/16/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_557\_4510.jpg



LM Start	<b>5.36</b>	Rating **	A/W	Issue No.	<b>141 (cont)</b>
LM End	<b>5.37</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_557\_4513.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	5.36	Rating **	A/W	Issue No.	141 (cont)	
LM End	5.37	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.813400 °	37.813300 °	
				-121.319300 °	-121.319200 °	
DWR ID	DWR_RD0544_01_f_2017_141					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:557						
Site Designation:LMA-463						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/16/2017						
Notes:						

Photo 3 of 3 : LEVAL\_FA\_2018\_557\_4514.jpg



LM Start	5.49	Rating **	U	Issue No.	18
LM End	5.55	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.812033 °	37.811687 °
				-121.319737 °	-121.320677 °
DWR ID	DWR_RD0544_01_s_2012_18				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Elderberry exists on the slope of the levee.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>5.56</b>	Rating **	A/W	Issue No.	<b>142</b>
LM End		Issue Type +	Ob	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.811830 °	°
				-121.320980 °	°
DWR ID	DWR_RD0544_01_f_2017_142				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:95					
Site Designation:189-4					
Repair Type: Seepage					
Rating:					
Field Date:					
Notes:					

No Photos

LM Start	<b>5.60</b>	Rating **	U	Issue No.	<b>121</b>
LM End	<b>5.60</b>	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.811234 °	37.811234 °
				-121.321412 °	-121.321412 °
DWR ID	DWR_RD0544_01_f_2015_121				
Comment Code					
RA : Ramp					
Inspector Comment					
Someone digging/excavating on waterward berm. Excavation in 3ft wide and eighteen inches deep and ten feet long. Possible boat ramp.					

Photo 1 of 4 : FA\_2018\_RD0544\_108\_121\_20180906\_00089.jpg



Looking west at excavation on waterward berm.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	5.60	Rating **	U	Issue No.	121 (cont)
LM End	5.60	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.811234 °	37.811234 °
				-121.321412 °	-121.321412 °
DWR ID	DWR_RD0544_01_f_2015_121				
Comment Code					
RA : Ramp					
Inspector Comment					
Someone digging/excavating on waterward berm. Excavation in 3ft wide and eighteen inches deep and ten feet long. Possible boat ramp.					

Photo 2 of 4 : FA\_2018\_RD0544\_108\_121\_20180906\_00090.jpg



Looking east at excavation on waterward berm.

LM Start	<b>5.60</b>	Rating **	U	Issue No.	<b>121 (cont)</b>
LM End	<b>5.60</b>	Issue Type +	En	Location *	WS

Photo 3 of 4 : FA\_2018\_RD0544\_108\_121\_20180906\_00091.jpg



Looking northeast at excavation on waterward berm

LM Start	<b>5.60</b>	Rating **	U	Issue No.	<b>121 (cont)</b>
LM End	<b>5.60</b>	Issue Type +	En	Location *	WS

Photo 4 of 4 : FA\_2018\_RD0544\_108\_121\_20180906\_00092.jpg



Looking southeast at excavation on waterward berm.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	5.64	Rating **	N	Issue No.	40
LM End	5.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.811199°	37.811199°
				-121.322176°	-121.322176°
DWR ID	DWR_RD0544_01_s_2012_40				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					

No Photos

LM Start	5.71	Rating **	M	Issue No.	166	
LM End	5.71	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.811193°	37.811193°	
				-121.323532°	-121.323532°	
DWR ID	22664					
Comment Code						
Inspector Comment						
FS_ID:53365 DS_ID:22664 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Pump on LS slope has been replaced and the erosion repaired; down-grading to Non-Urgent (D. Sanoski - DWR UCIP).12/22/2016: LS slope just above pipe is eroded with a giant pit exposing the electrical conduit. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/31/2013:- 2-inch electric conduit on waterside- service pole on landside.- needs a cover on pressure relief valve. (P. Amatya - DWR) FIELD_STRUCT_DESC: 16-inch steel irrigation discharge pipe through the levee, 5.3 feet below the crown. Pump mounted on a pile structure in the river. Steel walkway to the pump. Pressure relief valve in a butterfly configuration at the apex of the pipe on the landside (LS). Two 36-inch concrete standpipes at the LS toe. Electrical conduit through the levee. Power pole at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.77)]. FS Date: 10/2/2018 4:02:00 PM						

Photo 1 of 3 : UCIP\_FA\_2018\_53365\_42872.jpg



WS view: pump on pile structure, walkway to the pump on levee slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	5.71	Rating **	M	Issue No.	166 (cont)
LM End	5.71	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.811193 °	37.811193 °
				-121.323532 °	-121.323532 °
DWR ID	22664				

**Comment Code**

**Inspector Comment**

FS\_ID:53365  
DS\_ID:22664  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 10/2/2018 Pump on LS slope has been replaced and the erosion repaired; down-grading to Non-Urgent (D. Sanoski - DWR UCIP). 12/22/2016: LS slope just above pipe is eroded with a giant pit exposing the electrical conduit. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP) 10/31/2013:- 2-inch electric conduit on waterside- service pole on landside.- needs a cover on pressure relief valve. (P. Amatya - DWR)  
FIELD\_STRUCT\_DESC: 16-inch steel irrigation discharge pipe through the levee, 5.3 feet below the crown. Pump mounted on a pile structure in the river. Steel walkway to the pump. Pressure relief valve in a butterfly configuration at the apex of the pipe on the landside (LS). Two 36-inch concrete standpipes at the LS toe. Electrical conduit through the levee. Power pole at the LS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.77)].  
FS Date: 10/2/2018 4:02:00 PM

LM Start	<b>5.71</b>	Rating **	M	Issue No.	<b>166 (cont)</b>
LM End	<b>5.71</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_53365\_42871.jpg



WS view: pump on pile structure in the stream. Oil leaking pump.

Photo 3 of 3 : UCIP\_FA\_2018\_53365\_42870.jpg



LS view: exposed pipe and pressure valve on levee slope. Two concrete standpipes on levee toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	5.72	Rating **	C	Issue No.	115
LM End	5.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.811225 °	37.811225 °
				-121.323575 °	-121.323575 °
DWR ID	DWR_RD0544_01_s_2015_115				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Landowner excavated hole above pipe.Large hole left on landward shoulder and slope. Call LMA about repair.					

No Photos

LM Start	5.72	Rating **	C	Issue No.	110
LM End	5.72	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.811205 °	37.811205 °
				-121.323606 °	-121.323606 °
DWR ID	DWR_RD0544_01_f_2017_110				
Comment Code					
PI : Pipe					
Inspector Comment					
Discarded pipe at toe of landside slope.					

No Photos

LM Start	5.72	Rating **	C	Issue No.	126
LM End	5.72	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.811208 °	37.811208 °
				-121.323623 °	-121.323623 °
DWR ID	DWR_RD0544_01_s_2017_126				
Comment Code					
TR : Tree or limb					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.05	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>5.82</b>	Rating **	C	Issue No.	<b>124</b>
LM End	<b>5.82</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.811049°	37.811049°
				-121.325451°	-121.325451°
DWR ID	DWR_RD0544_01_s_2016_124				
Comment Code					
TR : Tree or limb					
Inspector Comment					

No Photos

**\* Location**  
 LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

**\*\* Rating**  
 A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
 Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2018 Levee Inspection Results**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway			Bank	Unit Miles
Unit No. 02 Old River			Right	4.15
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>U</b>	
Date of Inspection	4/26/2018 - 4/26/2018		9/13/2018 - 9/13/2018	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By	Richard Toy KSN		Richard Toy KSN	

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>0.04</b>	Rating **	A/W	Issue No.	<b>35</b>
LM End	<b>0.25</b>	Issue Type +	Ob	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		37.808820 °	37.808660 °	
			-121.328850 °	-121.332460 °	
DWR ID	DWR_RD0544_02_f_2017_35				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:97					
Site Designation:334-102					
Repair Type: Seepage					
Rating:					
Field Date:					
Notes:					

No Photos

LM Start	<b>0.21</b>	Rating **	A/W	Issue No.	<b>37</b>
LM End	<b>0.23</b>	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		37.808300 °	37.808400 °	
			-121.332000 °	-121.332200 °	
DWR ID	DWR_RD0544_02_f_2017_37				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:556					
Site Designation:LMA-462					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/16/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_556\_4520.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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# Reclamation District No. 0544 Upper Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.21	Rating **	A/W	Issue No.	37 (cont)
LM End	0.23	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.808300 °	37.808400 °
				-121.332000 °	-121.332200 °
DWR ID	DWR_RD0544_02_f _ 2017_37				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:556					
Site Designation:LMA-462					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/16/2017					
Notes:					

LM Start	<b>0.21</b>	Rating **	A/W	Issue No.	<b>37 (cont)</b>
LM End	<b>0.23</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_556\_4521.jpg



Photo 3 of 3 : LEVAL\_FA\_2018\_556\_4522.jpg



* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable	A : Acceptable                      N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable        C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.21	Rating **	U	Issue No.	2
LM End	0.26	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.808331 °	37.808576 °
				-121.331997 °	-121.332672 °
DWR ID	DWR_RD0544_02_s_2018_2				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_109\_2\_20180906\_00002.jpg



Looking southeast at dense veg on waterward slope. (Spring 2018)

LM Start	0.26	Rating **	A/W	Issue No.	45	
LM End	0.42	Issue Type +	Ob	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			37.808720 °	37.810060 °	
				-121.332660 °	-121.334700 °	
DWR ID	DWR_RD0544_02_f_2017_45					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:96						
Site Designation:334-100						
Repair Type: Seepage						
Rating:						
Field Date:						
Notes:						

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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# Reclamation District No. 0544 Upper Roberts Island

No Photos

Looking southwest at dense vegetation at landward toe.

Looking northwest at runoff erosion on landward shoulder and slope.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.44	Rating **	A/W	Issue No.	70
LM End	0.46	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.810400 °	37.810700 °
				-121.335000 °	-121.335000 °
DWR ID	DWR_RD0544_02_f_2017_70				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:555					
Site Designation:LMA-461					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/16/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_555\_4527.jpg



LM Start	<b>0.44</b>	Rating **	A/W	Issue No.	<b>70 (cont)</b>
LM End	<b>0.46</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_555\_4624.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

Photo 3 of 3 : LEVAL\_FA\_2018\_555\_4626.jpg

A photograph showing a river or stream with a rocky bank. The foreground is filled with dense, green and yellowish vegetation, including tall grasses and shrubs. The water is calm and reflects the sky. In the background, there is a flat, open landscape under a clear blue sky. A small, dark, bushy tree stands on the right bank.

Photo 1 of 3 : LEVAL\_FA\_2018\_554\_4630.jpg

A photograph showing a white SUV parked on a gravel path next to a river. A person is standing in the water near the riverbank. The background shows a clear blue sky and some trees.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.57	Rating **	A/W	Issue No.	80 (cont)
LM End	0.58	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.812300 °	37.812400 °
				-121.335100 °	-121.335100 °
DWR ID	DWR_RD0544_02_f_2017_80				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:554					
Site Designation:LMA-460					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/16/2017					
Notes:					

Photo 2 of 3 : LEVAL\_FA\_2018\_554\_4635.jpg



LM Start	<b>0.57</b>	Rating **	A/W	Issue No.	<b>80 (cont)</b>
LM End	<b>0.58</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_554\_4636.jpg



\* Location  
 LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

\*\* Rating  
 A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
 Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.64	Rating **	U	Issue No.	27
LM End	0.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.813307°	37.813307°
				-121.335135°	-121.335135°
DWR ID	DWR_RD0544_02_f_2018_27				
Comment Code					
TR : Tree or limb					
Inspector Comment					

Photo 1 of 2 : FA\_2018\_RD0544\_109\_27\_20180919\_00125.jpg



Looking southeast at tree limbs on waterward shoulder. (Fall 2018)

LM Start	<b>0.64</b>	Rating **	U	Issue No.	<b>27 (cont)</b>
LM End	<b>0.64</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2018\_RD0544\_109\_27\_20180919\_00126.jpg



Looking east at tree bank on waterslope slope. (Fall 2018)

LM Start	0.71	Rating **	M	Issue No.	98
LM End	0.71	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.814267 °	37.814267 °
				-121.334627 °	-121.334627 °
DWR ID	DWR_RD0544_02_f_2017_98				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.72	Rating **	A/W	Issue No.	5
LM End	0.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.814333 °	37.814333 °
				-121.334592 °	-121.334592 °
DWR ID	DWR_RD0544_02_s_2012_5				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	0.72	Rating **	A/W	Issue No.	81
LM End	0.76	Issue Type +	Ob	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.814200 °	37.814710 °
				-121.334270 °	-121.333830 °
DWR ID	DWR_RD0544_02_f_2017_81				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:91					
Site Designation:334-106					
Repair Type: Seepage					
Rating:					
Field Date:					
Notes:					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.	8
LM End	0.78	Issue Type +	Ma	Location *	WS
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude	
				Start	End
Item	Erosion Areas			37.815094 °	37.815094 °
				-121.333927 °	-121.333927 °
DWR ID	DWR_RD0544_02_s_2012_8				
Comment Code					
Inspector Comment					
Caving under and around siphon on waterside shoulder. No material 3' below pipe. Caving around siphon is 20" to 24" deep approximately 72" in diameter. During 2012 spring inspection hole appears to be enlarging.					

LM Start	<b>0.78</b>	Rating **	U	Issue No.	<b>8 (cont)</b>
LM End	<b>0.78</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA\_2018\_RD0544\_109\_8\_20180906\_00006.jpg



Looking south at depression greater than 6" on waterside shoulder.

Photo 2 of 4 : FA\_2018\_RD0544\_109\_8\_20180906\_00007.jpg



Looking east at caving around siphon on waterside shoulder. (Spring 2012)

LM Start	<b>0.78</b>	Rating **	U	Issue No.	<b>8 (cont)</b>
LM End	<b>0.78</b>	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA\_2018\_RD0544\_109\_8\_20180906\_00008.jpg



Looking west at caving around siphon on waterside shoulder. (Spring 2012)

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.	8 (cont)	
LM End	0.78	Issue Type +	Ma	Location *	WS	
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude		
				Start		End
Item	Erosion Areas			37.815094 °		37.815094 °
				-121.333927 °		-121.333927 °
DWR ID	DWR_RD0544_02_s_2012_8					
Comment Code						
Inspector Comment						
Caving under and around siphon on waterside shoulder. No material 3' below pipe. Caving around siphon is 20" to 24" deep approximately 72" in diameter. During 2012 spring inspection hole appears to be enlarging.						

Photo 4 of 4 : FA\_2018\_RD0544\_109\_8\_20180906\_00009.jpg



Looking south at caving around siphon on waterside shoulder.(Spring 2012)

LM Start	0.78	Rating **	U	Issue No.	103	
LM End	0.78	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.815098 °	37.815098 °	
				-121.333903 °	-121.333903 °	
DWR ID	22665					
Comment Code						
Inspector Comment						
FS_ID:53366 DS_ID:22665 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Same as last inspection; overgrown vegetation did not allow for visual inspection on LS so remains Urgent due to concern of erosion on WS (D. Sanoski - DWR UCIP).12/22/2016: Same as last inspection. Suspect siphon breaker is leaking due to depression around it. Two giant rodent holes through WS slope at siphon breaker. Siphon breaker is silted in. (K. Fazel - UCIP)10/31/2013:- 8 ft X 7 ft X 4 ft depression around siphon breaker on waterside slope.- no pipe visible on waterside due to dense vegetation.- electric conduit and service pole on landside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 4 feet below the crown. Pump in a drainage ditch off the landside (LS) toe. Siphon breaker on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/2/2018 4:06:00 PM						

Photo 1 of 3 : UCIP\_FA\_2018\_53366\_44882.jpg



WS view: depression on levee slope around siphon breaker.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.	103 (cont)	
LM End	0.78	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.815098 °	37.815098 °	
				-121.333903 °	-121.333903 °	
DWR ID	22665					
Comment Code						
Inspector Comment						
FS_ID:53366 DS_ID:22665 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Same as last inspection; overgrown vegetation did not allow for visual inspection on LS so remains Urgent due to concern of erosion on WS (D. Sanoski - DWR UCIP).12/22/2016: Same as last inspection. Suspect siphon breaker is leaking due to depression around it. Two giant rodent holes through WS slope at siphon breaker. Siphon breaker is silted in. (K. Fazel - UCIP)10/31/2013:- 8 ft X 7 ft X 4 ft depression around siphon breaker on waterside slope.- no pipe visible on waterside due to dense vegetation.- electric conduit and service pole on landside. (P. Amatya - DWR) FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 4 feet below the crown. Pump in a drainage ditch off the landside (LS) toe. Siphon breaker on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/2/2018 4:06:00 PM						

LM Start	<b>0.78</b>	Rating **	U	Issue No.	<b>103 (cont)</b>
LM End	<b>0.78</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_53366\_44881.jpg



WS view: depression on levee slope around siphon breaker. Siphon breaker in steel pipe riser.

Photo 3 of 3 : UCIP\_FA\_2018\_53366\_44880.jpg



LS view: pump on timber support in drainage ditch. About 150 ft from levee center.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

Photo 1 of 1 : FA\_2018\_RD0544\_109\_6\_20180906\_00003.jpg



Looking southeast at garbage on waterside shoulder and slope.

Photo 1 of 3 : LEVAL\_FA\_2018\_552\_4810.jpg

A photograph showing a riverbank. The foreground features a rocky shoreline with some green vegetation. The river water is visible on the left. The background shows a grassy hillside with a utility pole.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.01	Rating **	A/W	Issue No.	82 (cont)	
LM End	1.02	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.818100 °	37.818200 °	
				-121.332800 °	-121.332800 °	
DWR ID	DWR_RD0544_02_f_2017_82					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:552						
Site Designation:LMA-458						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/16/2017						
Notes:						

Photo 2 of 3 : LEVAL\_FA\_2018\_552\_4811.jpg



LM Start	<b>1.01</b>	Rating **	A/W	Issue No.	<b>82 (cont)</b>
LM End	<b>1.02</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_552\_4813.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.12	Rating **	M	Issue No.	20
LM End	1.12	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.819530 °	37.819530 °
				-121.333827 °	-121.333827 °
DWR ID	DWR_RD0544_02_s_2012_20				
Comment Code					
PR : Prunings					
Inspector Comment					
Landowner is stock piling prunings on landside slope and toe.					

Photo 1 of 1 : FA\_2018\_RD0544\_109\_20\_20180906\_00019.jpg



Looking southwest at pruning piles on landward slope.

LM Start	1.13	Rating **	U	Issue No.	25
LM End	1.19	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.819560 °	37.820083 °
				-121.333893 °	-121.334812 °
DWR ID	DWR_RD0544_02_s_2012_25				
Comment Code					
DE : Debris					
Inspector Comment					

Photo 1 of 2 : FA\_2018\_RD0544\_109\_25\_20180906\_00023.jpg



LM Start	<b>1.13</b>	Rating **	U	Issue No.	<b>25 (cont)</b>
LM End	<b>1.19</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA\_2018\_RD0544\_109\_25\_20180906\_00024.jpg



Looking south at farm equipment stored on landward shoulder and slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

Photo 1 of 1 : FA\_2018\_RD0544\_109\_18\_20180906\_00015.jpg



Looking southwest from farm equipment stored on landward landing.  
(spring 2016)


Photo 1 of 1 : FA\_2018\_RD0544\_109\_101\_20180906\_00093.jpg



11 02 2017

Looking northwest at the waterside slope.

Photo 1 of 1 : FA\_2018\_RD0544\_109\_102\_20180906\_00094.jpg



Looking northwest at the landside slope.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.34	Rating **	M	Issue No.	56
LM End	1.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.821168 °	37.822083 °
				-121.337212 °	-121.338862 °
DWR ID	DWR_RD0544_02_s_2015_56				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	1.38	Rating **	M	Issue No.	104
LM End	1.38	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.821380 °	37.821380 °
				-121.337835 °	-121.337835 °
DWR ID	22668				
Comment Code					
Inspector Comment					
FS_ID:46674 DS_ID:22668 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - slope erosion on landside. FIELD_STRUCT_DESC: 8-inch pipe of an unknown material or purpose through the levee, 3.5 feet below the crown. Pipe open on both ends, 1991. Steel pipe riser on the landside (LS), but not sure whether it is connected to the pipe. [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/31/2013					

Photo 1 of 3 : UCIP\_FA\_2018\_46674\_44890.jpg



WS view: steel pipe on levee slope with opened end.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.38	Rating **	M	Issue No.	104 (cont)	
LM End	1.38	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.821380 °	37.821380 °	
				-121.337835 °	-121.337835 °	
DWR ID	22668					
Comment Code						
Inspector Comment						
FS_ID:46674 DS_ID:22668 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - slope erosion on landside. FIELD_STRUCT_DESC: 8-inch pipe of an unknown material or purpose through the levee, 3.5 feet below the crown. Pipe open on both ends, 1991. Steel pipe riser on the landside (LS), but not sure whether it is connected to the pipe. [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/31/2013						

Photo 2 of 3 : UCIP\_FA\_2018\_46674\_44889.jpg



LS view: steel pipe on levee slope with opened end. Levee slope erosion around the pipe.

LM Start	<b>1.38</b>	Rating **	M	Issue No.	<b>104 (cont)</b>
LM End	<b>1.38</b>	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP\_FA\_2018\_46674\_44888.jpg



LS view: steel pipe riser off the levee toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.38	Rating **	U	Issue No.	10
LM End	1.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.821423°	37.821423°
				-121.337878°	-121.337878°
DWR ID	DWR_RD0544_02_s_2012_10				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Dense elderberry on landside slope and toe.					

No Photos

LM Start	1.39	Rating **	A/W	Issue No.	83	
LM End	1.41	Issue Type +	Ob	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			37.821440°		37.821620°
				-121.337950°		-121.338250°
DWR ID	DWR_RD0544_02_f_2017_83					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:88						
Site Designation:334-23						
Repair Type: Seepage						
Rating:						
Field Date:						
Notes:						

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>1.40</b>	Rating **	M	Issue No.	<b>22 (cont)</b>
LM End	<b>1.42</b>	Issue Type +	Ma	Location *	LS

A photograph showing a white pickup truck parked on the right side of a gravel road. The road curves to the right, leading towards a line of trees and a small, low-lying structure in the distance. The foreground is dominated by a sandy, eroded area with some sparse green vegetation. The sky is clear and blue.

A photograph of a dirt road or path leading towards a field. The road is unpaved and appears to be made of dry earth and gravel. On the left side of the road, there is a patch of green grass. On the right side, there is a large, dark, shadowed area, possibly a ditch or a large pile of material. In the background, there are some trees and a clear sky.

LM Start	1.43	Rating **	U	Issue No.	29					
LM End	1.47	Issue Type +	Ma	Location *	WS					
Category	Earthen Levee			GPS Latitude/Longitude						
				Start	End					
Item	Vegetation			37.821845 °	37.822280 °					
				-121.338553 °	-121.339145 °					
DWR ID	DWR_RD0544_02_f_2018_29									
Comment Code										
V2 : Remove the wild growth other than native grasses from the levee slopes.										
Inspector Comment										
Dense veg on waterward slope.										

A photograph of a dirt road lined with dense, green, leafy vegetation on the left and trees on the right, under a clear blue sky. A date stamp '09 13 2018' is visible in the bottom right corner.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.44	Rating **	M	Issue No.	28
LM End	1.44	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.821954 °	37.821954 °
				-121.338715 °	-121.338715 °
DWR ID	DWR_RD0544_02_s _ 2012_28				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	1.46	Rating **	C	Issue No.	23
LM End	1.46	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.822082 °	37.822082 °
				-121.338932 °	-121.338932 °
DWR ID	DWR_RD0544_02_s _ 2012_23				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree and limbs should be removed from landside shoulder and slope.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.51	Rating **	M	Issue No.	105	
LM End	1.51	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.822415 °	37.822415 °	
				-121.339699 °	-121.339699 °	
DWR ID	22669					
Comment Code						
Inspector Comment						
FS_ID:24288						
DS_ID:22669						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: - two pumps with 16" steel pipe and an abandoned pump with 10" pipe inside pump house.- CMP riser cover needs repair. - electric conduits on waterside and power pole on landside.						
FIELD_STRUCT_DESC: 24-inch steel irrigation discharge pipe through the levee, 14 feet below the crown. Pump in a pump house on the waterside (WS) berm. Slide gate in a corrugated metal pipe (CMP) riser on the WS slope. Two corrugated metal cutoff walls. Distribution box and power pole at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.53)].						
FS Date: 10/31/2013						

LM Start	<b>1.51</b>	Rating **	M	Issue No.	<b>105 (cont)</b>
LM End	<b>1.51</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_24288\_42947.jpg



WS view: slide gate in CMP riser, walkway, and pump house on levee slope.

Photo 2 of 3 : UCIP\_FA\_2018\_24288\_42946.jpg



WS view: two pumps discharges water into CMP riser on levee slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.51	Rating **	M	Issue No.	105 (cont)	
LM End	1.51	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.822415 °	37.822415 °	
				-121.339699 °	-121.339699 °	
DWR ID	22669					
Comment Code						
Inspector Comment						
FS_ID:24288						
DS_ID:22669						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: - two pumps with 16" steel pipe and an abandoned pump with 10" pipe inside pump house.- CMP riser cover needs repair. - electric conduits on waterside and power pole on landside.						
FIELD_STRUCT_DESC: 24-inch steel irrigation discharge pipe through the levee, 14 feet below the crown. Pump in a pump house on the waterside (WS) berm. Slide gate in a corrugated metal pipe (CMP) riser on the WS slope. Two corrugated metal cutoff walls. Distribution box and power pole at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.53)].						
FS Date: 10/31/2013						

Photo 3 of 3 : UCIP\_FA\_2018\_24288\_42945.jpg



WS view: abandoned 10" steel pipe daylights on levee slope.

LM Start	1.52	Rating **	M	Issue No.	106	
LM End	1.52	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.822445 °		37.822445 °
				-121.339910 °		-121.339910 °
DWR ID	24716					
Comment Code						
Inspector Comment						
FS_ID:24907 DS_ID:24716 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No pipe and appurtenances found on waterside.Looks abandoned. FIELD_STRUCT_DESC: *ABANDONED* 8-inch steel drainage discharge pipe through the levee, at an unknown depth. Pump house at the landside (LS) toe. Air vent in a corrugated metal pipe (CMP) riser on the LS shoulder. Outlet on the waterside (WS) not visible. No positive closure device. Appears abandoned. FS Date: 10/31/2013						

Photo 1 of 3 : UCIP\_FA\_2018\_24907\_44895.jpg



LS view: pipe, pump house, and appurtenances on levee slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.52	Rating **	M	Issue No.	106 (cont)	
LM End	1.52	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.822445 °	37.822445 °	
				-121.339910 °	-121.339910 °	
DWR ID	24716					
Comment Code						
Inspector Comment						
FS_ID:24907 DS_ID:24716 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No pipe and appurtenances found on waterside.Looks abandoned. FIELD_STRUCT_DESC: *ABANDONED* 8-inch steel drainage discharge pipe through the levee, at an unknown depth. Pump house at the landside (LS) toe. Air vent in a corrugated metal pipe (CMP) riser on the LS shoulder. Outlet on the waterside (WS) not visible. No positive closure device. Appears abandoned. FS Date: 10/31/2013						

LM Start	<b>1.52</b>	Rating **	M	Issue No.	<b>106 (cont)</b>
LM End	<b>1.52</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_24907\_44894.jpg



LS view: pipe daylights on levee slope.

Photo 3 of 3 : UCIP\_FA\_2018\_24907\_44893.jpg



WS view: air vent on CMP riser on levee shoulder.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>1.72</b>	Rating **	A/W	Issue No.	<b>84</b>
LM End		Issue Type +	Ob	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.820010°	°
				-121.341520°	°
DWR ID	DWR_RD0544_02_f_2017_84				
Comment Code					
Inspector Comment					
Levee Evaluation Comments Description: Site ID No:89 Site Designation:334-FOC-14 Repair Type: Seepage Rating: Field Date: Notes:					

No Photos

LM Start	<b>1.77</b>	Rating **	A/W	Issue No.	<b>85</b>
LM End	<b>1.90</b>	Issue Type +	Ob	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.819290°	37.817590°
				-121.341460°	-121.341960°
DWR ID	DWR_RD0544_02_f_2017_85				
Comment Code					
Inspector Comment					
Levee Evaluation Comments Description: Site ID No:99 Site Designation:334-FOC-15 Repair Type: Seepage Rating: Field Date: Notes:					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.85	Rating **	A/W	Issue No.	86	
LM End		Issue Type +	Ob	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.818240 °		°
				-121.341930 °		°
DWR ID	DWR_RD0544_02_f _ 2017_86					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:90						
Site Designation:334-19						
Repair Type: Seepage						
Rating:						
Field Date:						
Notes:						

No Photos

LM Start	1.86	Rating **	U	Issue No.	38
LM End	1.86	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.817983 °	37.817983 °
				-121.341682 °	-121.341682 °
DWR ID	DWR_RD0544_02_s_2015_38				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion/Caving on waterside shoulder and slope 18" x 6" x 15'.					

Photo 1 of 2 : FA\_2018\_RD0544\_109\_38\_20180906\_00031.jpg



Looking southeast at erosion/caving on waterward slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	1.86	Rating **	U	Issue No.	38 (cont)	
LM End	1.86	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.817983 °	37.817983 °	
				-121.341682 °	-121.341682 °	
DWR ID	DWR_RD0544_02_s_2015_38					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Erosion/Caving on waterside shoulder and slope 18" x 6" x 15'.						

Photo 2 of 2 : FA\_2018\_RD0544\_109\_38\_20180906\_00032.jpg



Looking east at erosion/caving on waterward slope.

LM Start	1.90	Rating **	U	Issue No.	31
LM End	1.90	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.817582 °	37.817582 °
				-121.342125 °	-121.342125 °
DWR ID	DWR_RD0544_02_f_2018_31				
Comment Code					
PR : Prunings					
Inspector Comment					
Large pruning pile at landward toe.					

Photo 1 of 2 : FA\_2018\_RD0544\_109\_31\_20180919\_00128.jpg



Looking south at large pruning pile at landward toe. (Fall 2018)

LM Start	<b>1.90</b>	Rating **	U	Issue No.	<b>31 (cont)</b>
LM End	<b>1.90</b>	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA\_2018\_RD0544\_109\_31\_20180919\_00129.jpg



Looking northwest t large pruning pile at landward toe. (Fall 2018)

* Location LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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## Levee Inspection Report By Mile - Fall 2018


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

Photo 1 of 2 : FA\_2018\_RD0544\_109\_34\_20180919\_00130.jpg



Looking west at erosion on waterward slope. (Fall 2018)

Photo 2 of 2 : FA\_2018\_RD0544\_109\_34\_20180919\_00131.jpg



Looking east at foot erosion on waterward slope. (Fall 2018)

Photo 1 of 1 : FA\_2018\_RD0544\_109\_58\_20180906\_00040.jpg



Looking at typical rodent holes on landward slope.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.07	Rating **	U	Issue No.	13
LM End	2.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.819337 °	37.819460 °
				-121.344275 °	-121.344492 °
DWR ID	DWR_RD0544_02_s _ 2012_13				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.12	Rating **	C	Issue No.	59
LM End	2.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.819738 °	37.819738 °
				-121.344922 °	-121.344922 °
DWR ID	DWR_RD0544_02_s _ 2015_59				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landside shoulder and slope.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

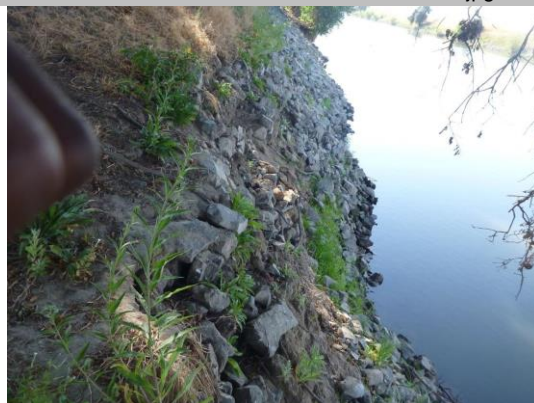
LM Start	<b>2.17</b>	Rating **	A/W	Issue No.	<b>87</b>							
LM End	<b>2.18</b>	Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	2017 Storm Damage		37.820300°	37.820300°								
			-121.345600°	-121.345700°								
DWR ID	DWR_RD0544_02_f_2017_87											
Comment Code												
Inspector Comment												
Levee Evaluation Comments Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage. Site ID No: 551 Site Designation: LMA-457 Repair Type: Erosion Rating: Serious Field Date: 8/18/2017 Notes:												

Photo 1 of 3 : LEVAL\_FA\_2018\_551\_4817.jpg



LM Start	<b>2.17</b>	Rating **	A/W	Issue No.	<b>87 (cont)</b>
LM End	<b>2.18</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_551\_4818.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.17	Rating **	A/W	Issue No.	87 (cont)
LM End	2.18	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.820300 °	37.820300 °
				-121.345600 °	-121.345700 °
DWR ID	DWR_RD0544_02_f _ 2017_87				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:551					
Site Designation:LMA-457					
Repair Type: Erosion					
Rating:Serious					
Field Date:8/18/2017					
Notes:					

Photo 3 of 3 : LEVAL\_FA\_2018\_551\_4824.jpg



LM Start	2.18	Rating **	C	Issue No.	68
LM End	2.18	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.820315 °	37.820315 °
				-121.345689 °	-121.345689 °
DWR ID	DWR_RD0544_02_f_2016_68				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Broken dead tree limb on waterside shoulder.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.18	Rating **	A/W	Issue No.	88
LM End	2.19	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.820400 °	37.820500 °
				-121.345800 °	-121.345900 °
DWR ID	DWR_RD0544_02_f_2017_88				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:550					
Site Designation:LMA-456					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/18/2017					
Notes:					

Photo 1 of 4 : LEVAL\_FA\_2018\_550\_4832.jpg



LM Start	<b>2.18</b>	Rating **	A/W	Issue No.	<b>88 (cont)</b>
LM End	<b>2.19</b>	Issue Type +	Ma	Location *	

Photo 2 of 4 : LEVAL\_FA\_2018\_550\_4564.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.18	Rating **	A/W	Issue No.	88 (cont)	
LM End	2.19	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.820400 °	37.820500 °	
				-121.345800 °	-121.345900 °	
DWR ID	DWR_RD0544_02_f_2017_88					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:550						
Site Designation:LMA-456						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/18/2017						
Notes:						

Photo 3 of 4 : LEVAL\_FA\_2018\_550\_4570.jpg



LM Start	<b>2.18</b>	Rating **	A/W	Issue No.	<b>88 (cont)</b>
LM End	<b>2.19</b>	Issue Type +	Ma	Location *	

Photo 4 of 4 : LEVAL\_FA\_2018\_550\_4575.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>2.20</b>	Rating **	C	Issue No.	<b>60</b>
LM End	<b>2.20</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.820655 °	37.820655 °
				-121.345982 °	-121.345982 °
DWR ID	DWR_RD0544_02_s _ 2015_60				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

LM Start	<b>2.21</b>	Rating **	M	Issue No.	<b>32</b>
LM End	<b>2.21</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.820697 °	37.820697 °
				-121.346050 °	-121.346050 °
DWR ID	DWR_RD0544_02_s _ 2012_32				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

**\* Location**  
 LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

**\*\* Rating**  
 A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
 Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.21	Rating **	M	Issue No.	107
LM End	2.21	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.820694 °	37.820694 °
				-121.346067 °	-121.346067 °
DWR ID	22675				
Comment Code					
Inspector Comment					
FS_ID:41731 DS_ID:22675 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - soil erosion on landside slope.- new pump and pipe (according to the owner- three months old)- electric conduit through levee, service pole on landside. FIELD_STRUCT_DESC: 16-inch steel irrigation discharge pipe and electrical conduit through the levee, 3 feet below the crown. Pump on a pile structure in the stream. Pressure breaker on the landside (LS) slope. Pipe exposed on both slopes and on the berm. [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.25), 12-inch pipe referenced]. FS Date: 10/31/2013					

LM Start	<b>2.21</b>	Rating **	M	Issue No.	<b>107 (cont)</b>
LM End	<b>2.21</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_41731\_42954.jpg



WS view: pipe, walkway, and pump on pile structure.

Photo 2 of 3 : UCIP\_FA\_2018\_41731\_42953.jpg



WS view: closer view of pipe, walkway, and pump on pile structure.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.21	Rating **	M	Issue No.	107 (cont)	
LM End	2.21	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.820694 °	37.820694 °	
				-121.346067 °	-121.346067 °	
DWR ID	22675					
Comment Code						
Inspector Comment						
FS_ID:41731 DS_ID:22675 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - soil erosion on landside slope.- new pump and pipe (according to the owner- three months old)- electric conduit through levee, service pole on landside. FIELD_STRUCT_DESC: 16-inch steel irrigation discharge pipe and electrical conduit through the levee, 3 feet below the crown. Pump on a pile structure in the stream. Pressure breaker on the landside (LS) slope. Pipe exposed on both slopes and on the berm. [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.25), 12-inch pipe referenced]. FS Date: 10/31/2013						

Photo 3 of 3 : UCIP\_FA\_2018\_41731\_42957.jpg



LS view: service pole on levee slope.

LM Start	2.24	Rating **	M	Issue No.	33
LM End	2.35	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.821096 °	37.821945 °
				-121.346418 °	-121.347897 °
DWR ID	DWR_RD0544_02_s_2012_33				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.28	Rating **	C	Issue No.	61
LM End	2.28	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.821473 °	37.821473 °
				-121.346860 °	-121.346860 °
DWR ID	DWR_RD0544_02_s_2015_61				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed tree on landside shoulder. Tree was trimmed but still requires additional trimming.					

No Photos

LM Start	2.29	Rating **	M	Issue No.	108
LM End	2.29	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.821628 °	37.821628 °
				-121.347016 °	-121.347016 °
DWR ID	22676				
Comment Code					
Inspector Comment					
FS_ID:24293					
DS_ID:22676					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Pump not found on the landward side.					
FIELD_STRUCT_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on the landside (LS). No flap gate on the waterside (WS) end. Air vent on the LS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.33)].					
FS Date: 10/31/2013					

Photo 1 of 3 : UCIP\_FA\_2018\_24293\_42965.jpg



WS view: exposed steel pipe on berm.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.29	Rating **	M	Issue No.	108 (cont)	
LM End	2.29	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.821628 °	37.821628 °	
				-121.347016 °	-121.347016 °	
DWR ID	22676					
Comment Code						
Inspector Comment						
FS_ID:24293 DS_ID:22676 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pump not found on the landward side. FIELD_STRUCT_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on the landside (LS). No flap gate on the waterside (WS) end. Air vent on the LS. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.33)]. FS Date: 10/31/2013						

LM Start	<b>2.29</b>	Rating **	M	Issue No.	<b>108 (cont)</b>
LM End	<b>2.29</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_FA\_2018\_24293\_42964.jpg



WS view: 12" steel pipe connected to 10" pipe. Holes on pipe top found.

Photo 3 of 3 : UCIP\_FA\_2018\_24293\_42966.jpg



LS view: exposed steel pipe and air vent on levee berm. No pump found.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.31	Rating **	M	Issue No.	11
LM End	2.31	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.821763 °	37.821763 °
				-121.347275 °	-121.347275 °
DWR ID	RD0544U02RM33.21				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/25/2015: No significant change observed.					
07/02/2014: No significant change observed.					
08/20/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. The data were estimated as the site is underneath a irrigation pump station and inaccessible by boat or land survey. It's possible the pump station played a role in the erosion. [2017 Site ID:RD0544U02RM33.21]					

LM Start	<b>2.31</b>	Rating **	M	Issue No.	<b>11 (cont)</b>
LM End	<b>2.31</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA\_2018\_RD0544\_109\_11\_20180906\_00012.jpg



Front view of the erosion site. View is partially blocked by the pump structure and vegetation at the site.

Photo 2 of 3 : FA\_2018\_RD0544\_109\_11\_20180906\_00013.jpg



Front view of the site.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

Photo 3 of 3 : FA\_2018\_RD0544\_109\_11\_20180906\_00014.jpg



Close view of the site.

Photo 1 of 3 : LEVAL\_FA\_2018\_549\_4588.jpg

A photograph showing a riverbank. In the foreground, large, gnarled tree roots are exposed on the left side. The bank is covered with green vegetation and some bare soil. In the background, there is a dense line of trees and shrubs along the water's edge. The water is visible on the right side of the image, reflecting the sky and trees.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

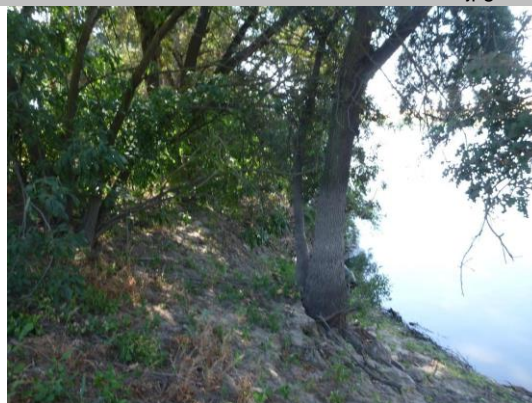
LM Start	2.32	Rating **	A/W	Issue No.	89 (cont)	
LM End	2.33	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.821800 °	37.821900 °	
				-121.347500 °	-121.347600 °	
DWR ID	DWR_RD0544_02_f_2017_89					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:549						
Site Designation:LMA-455						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/18/2017						
Notes:						

Photo 2 of 3 : LEVAL\_FA\_2018\_549\_4590.jpg



LM Start	<b>2.32</b>	Rating **	A/W	Issue No.	<b>89 (cont)</b>
LM End	<b>2.33</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_549\_4654.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.41	Rating **	U	Issue No.	73
LM End	2.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.821423 °	37.819153 °
				-121.348849 °	-121.350231 °
DWR ID	DWR_RD0544_02_f_2017_73				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_109\_73\_20180906\_00056.jpg



Looking southwest at the landside slope.

LM Start	2.57	Rating **	A/W	Issue No.	75
LM End	2.57	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.819373 °	37.819373 °
				-121.350077 °	-121.350077 °
DWR ID	DWR_RD0544_02_s_2017_75				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree limbs on waterside slope.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.61	Rating **	M	Issue No.	109	
LM End	2.61	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.818888 °	37.818888 °	
				-121.350390 °	-121.350390 °	
DWR ID	22678					
Comment Code						
Inspector Comment						
FS_ID:51381 DS_ID:22678 EP_NO: 8625A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - abandoned crossing. Needs proper abandonment.- pump removed. Pipe discontinued on landside.- pile structure in dilapalated condon. FIELD_STRUCT_DESC: 16-inch coated steel irrigation discharge pipe through the levee, 7 feet below the crown. Pump mounted on a pile structure in the stream. Siphon breaker on the landside (LS) shoulder. Power pole on the LS slope. (Retention of an existing 16-inch irrigation pipe and pump through the levee authorized under Permit No. 8625-A, 1973 - Irvin Muller). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.65), referenced as 10 feet below the crown]. FS Date: 10/31/2013						

LM Start	<b>2.61</b>	Rating **	M	Issue No.	<b>109 (cont)</b>
LM End	<b>2.61</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_51381\_42972.jpg



WS view: dilapidated walkway and pile structure. Pump removed.

Photo 2 of 3 : UCIP\_FA\_2018\_51381\_42971.jpg



LS view: steel pipe cut out and discontinued (bottom).

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.61	Rating **	M	Issue No.	109 (cont)	
LM End	2.61	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.818888 °	37.818888 °	
				-121.350390 °	-121.350390 °	
DWR ID	22678					
Comment Code						
Inspector Comment						
FS_ID:51381 DS_ID:22678 EP_NO: 8625A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - abandoned crossing. Needs proper abandonment.- pump removed. Pipe discontinued on landside.- pile structure in dilapalated condon. FIELD_STRUCT_DESC: 16-inch coated steel irrigation discharge pipe through the levee, 7 feet below the crown. Pump mounted on a pile structure in the stream. Siphon breaker on the landside (LS) shoulder. Power pole on the LS slope. (Retention of an existing 16-inch irrigation pipe and pump through the levee authorized under Permit No. 8625-A, 1973 - Irvin Muller). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.65), referenced as 10 feet below the crown]. FS Date: 10/31/2013						

Photo 3 of 3 : UCIP\_FA\_2018\_51381\_42970.jpg



LS view: inside view of cut open pipe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.61	Rating **	M	Issue No.	110
LM End	2.61	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.818860 °	37.818860 °
				-121.350428 °	-121.350428 °
DWR ID	24718				
Comment Code					
Inspector Comment					
FS_ID:53173 DS_ID:24718 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Same as last inspection; downgrading to Non-Urgent due to no visual pipe or levee integrity threat (D. Sanoski - DWR UCIP).12/22/2016: Pipe is open on both ends and requires either proper abandonment or flap gate and closure device. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/31/2013:- needs proper abandonment or closer of pipe end. (P. Amatya - DWR) FIELD_STRUCT_DESC: 14-inch steel pipe of an unknown purpose through the levee, 2 feet below the crown. Pipe open on both ends. 1-inch open conduit also at this location. This crossing was field discovered. FS Date: 10/2/2018 4:13:47 PM					

LM Start	<b>2.61</b>	Rating **	M	Issue No.	<b>110 (cont)</b>
LM End	<b>2.61</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_53173\_42977.jpg



WS view: steel pipe and electric conduit on levee shoulder.

Photo 2 of 3 : UCIP\_FA\_2018\_53173\_42976.jpg



LS view: steel pipe and electric conduit on levee shoulder.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.61	Rating **	M	Issue No.	110 (cont)	
LM End	2.61	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.818860 °	37.818860 °	
				-121.350428 °	-121.350428 °	
DWR ID	24718					
Comment Code						
Inspector Comment						
FS_ID:53173 DS_ID:24718 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Same as last inspection; downgrading to Non-Urgent due to no visual pipe or levee integrity threat (D. Sanoski - DWR UCIP).12/22/2016: Pipe is open on both ends and requires either proper abandonment or flap gate and closure device. Crossing has been upgraded from Non-Urgent to Urgent. (K. Fazel - UCIP)10/31/2013:- needs proper abandonment or closer of pipe end. (P. Amatya - DWR) FIELD_STRUCT_DESC: 14-inch steel pipe of an unknown purpose through the levee, 2 feet below the crown. Pipe open on both ends. 1-inch open conduit also at this location. This crossing was field discovered. FS Date: 10/2/2018 4:13:47 PM						

Photo 3 of 3 : UCIP\_FA\_2018\_53173\_76632.jpg



WS view

LM Start	2.61	Rating **	U	Issue No.	69
LM End	2.61	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.818806 °	37.818806 °
				-121.350437 °	-121.350437 °
DWR ID	DWR_RD0544_02_f_2016_69				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.					

Photo 1 of 5 : FA\_2018\_RD0544\_109\_69\_20180906\_00047.jpg



Looking south at erosion on shoulder. (Spring 2018)

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.61	Rating **	U	Issue No.	69 (cont)	
LM End	2.61	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.818806 °	37.818806 °	
				-121.350437 °	-121.350437 °	
DWR ID	DWR_RD0544_02_f __ 2016_69					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.						

Photo 2 of 5 : FA\_2018\_RD0544\_109\_69\_20180906\_00048.jpg



Looking east at erosion on waterward slope. (Spring 2018)

LM Start	<b>2.61</b>	Rating **	U	Issue No.	<b>69 (cont)</b>
LM End	<b>2.61</b>	Issue Type +	Ma	Location *	WS

Photo 3 of 5 : FA\_2018\_RD0544\_109\_69\_20180906\_00049.jpg



Looking south at erosion on waterward shoulder and slope.

LM Start	<b>2.61</b>	Rating **	U	Issue No.	<b>69 (cont)</b>
LM End	<b>2.61</b>	Issue Type +	Ma	Location *	WS

Photo 4 of 5 : FA\_2018\_RD0544\_109\_69\_20180906\_00050.jpg



Looking south at waterward erosion.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.61	Rating **	U	Issue No.	69 (cont)	
LM End	2.61	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.818806 °		37.818806 °
				-121.350437 °		-121.350437 °
DWR ID	DWR_RD0544_02_f _ 2016_69					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.						

Photo 5 of 5 : FA\_2018\_RD0544\_109\_69\_20180906\_00051.jpg



Looking north at erosion on waterward shoulder and slope.

LM Start	2.67	Rating **	M	Issue No.	76
LM End	2.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.818112 °	37.818112 °
				-121.351108 °	-121.351108 °
DWR ID	DWR_RD0544_02_s_2017_76				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable  
N : Not Inspected/Rated  
C : Corrected  
A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.68	Rating **	M	Issue No.	7
LM End	2.70	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.817905 °	37.817905 °
				-121.351102 °	-121.351102 °
DWR ID	RD0544U02RM32.91				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/25/2015: No significant change observed.					
07/02/2014: No significant change observed.					
10/11/2013: No significant change observed.					
08/07/2012: Series of pocket erosion were discovered at the levee toe during the boat survey. The area is covered with vegetation and riprap, but the rip rap has been washed away. [2017 Site ID:RD0544U02RM32.91]					

Photo 1 of 2 : FA\_2018\_RD0544\_109\_7\_20180906\_00004.jpg



Front view of the pocket erosion. Note vegetation and riprap at the site.

LM Start	<b>2.68</b>	Rating **	M	Issue No.	<b>7 (cont)</b>
LM End	<b>2.70</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA\_2018\_RD0544\_109\_7\_20180906\_00005.jpg



Front view of the pocket erosion.

**\* Location**  
 LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

**\*\* Rating**  
 A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
 Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.68	Rating **	A/W	Issue No.	90
LM End	2.71	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.818000 °	37.817800 °
				-121.351200 °	-121.351500 °
DWR ID	DWR_RD0544_02_f_2017_90				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:548					
Site Designation:LMA-454					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/18/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_548\_4661.jpg



LM Start	<b>2.68</b>	Rating **	A/W	Issue No.	<b>90 (cont)</b>
LM End	<b>2.71</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_548\_4666.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.68	Rating **	A/W	Issue No.	90 (cont)	
LM End	2.71	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.818000 °	37.817800 °	
				-121.351200 °	-121.351500 °	
DWR ID	DWR_RD0544_02_f_2017_90					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:548						
Site Designation:LMA-454						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/18/2017						
Notes:						

Photo 3 of 3 : LEVAL\_FA\_2018\_548\_4669.jpg



LM Start	2.69	Rating **	U	Issue No.	52
LM End	3.11	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.817928 °	37.817698 °
				-121.351355 °	-121.358582 °
DWR ID	DWR_RD0544_02_f_2014_52				
Comment Code					
V9 : Keep the crown roadway free of vegetation.					
Inspector Comment					

Photo 1 of 3 : FA\_2018\_RD0544\_109\_52\_20180906\_00035.jpg



Looking south at veg on levee crown. (Spring 2018)

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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# Reclamation District No. 0544 Upper Roberts Island



## Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

Photo 2 of 2 : FA\_2018\_RD0544\_109\_43\_20180906\_00034.jpg



A gravel path leads through dense, dry vegetation on a slope. The vegetation consists of tall, dry grasses and shrubs. In the background, there are some trees and a clear blue sky.

Looking at dense vegetation on landward and waterward slope.

Photo 1 of 3 : LEVAL\_FA\_2018\_547\_4677.jpg

A photograph showing a perspective view of a path or road. The path is bordered on the right by tall, dry, golden-brown grass. On the left, there is a dense line of green vegetation, possibly a hedge or a row of young trees. In the distance, a line of mature trees is visible against a clear, bright blue sky. The overall scene suggests a rural or park-like setting.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.76	Rating **	A/W	Issue No.	91 (cont)	
LM End	2.77	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			37.817400 °		37.817300 °
				-121.352300 °		-121.352500 °
DWR ID	DWR_RD0544_02_f_2017_91					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:547						
Site Designation:LMA-453						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/18/2017						
Notes: levee slopes covered in dense vegetations that hindered visibility.						

Photo 2 of 3 : LEVAL\_FA\_2018\_547\_4687.jpg



LM Start	<b>2.76</b>	Rating **	A/W	Issue No.	<b>91 (cont)</b>
LM End	<b>2.77</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_547\_4688.jpg

**\* Location**

LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	2.80	Rating **	M	Issue No.	53
LM End	2.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.817187°	37.817187°
				-121.352964°	-121.352964°
DWR ID	DWR_RD0544_02_f_2014_53				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_109\_53\_20180906\_00038.jpg



Looking southwest at untrimmed tree on landward slope fall 2015.

LM Start	3.10	Rating **	U	Issue No.	77
LM End	3.10	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.817588°	37.817588°
				-121.358352°	-121.358352°
DWR ID	DWR_RD0544_02_s_2017_77				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Rip rap was placed but does not meet Title 23 standards.					

Photo 1 of 1 : FA\_2018\_RD0544\_109\_77\_20180906\_00057.jpg



Looking northeast at concrete rubble on waterward slope.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.11	Rating **	A/W	Issue No.	92
LM End	3.12	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.817700 °	37.817800 °
				-121.358600 °	-121.358700 °
DWR ID	DWR_RD0544_02_f_2017_92				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:546					
Site Designation:LMA-452					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/18/2017					
Notes: dense vegetations on both sides of the levee made the slopes inaccessible					

Photo 1 of 3 : LEVAL\_FA\_2018\_546\_4693.jpg



LM Start	<b>3.11</b>	Rating **	A/W	Issue No.	<b>92 (cont)</b>
LM End	<b>3.12</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_546\_4695.jpg

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>3.11</b>	Rating **	A/W	Issue No.	<b>92 (cont)</b>
LM End	<b>3.12</b>	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.817700°	37.817800°
				-121.358600°	-121.358700°
DWR ID	DWR_RD0544_02_f_2017_92				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 546</p> <p>Site Designation: LMA-452</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/18/2017</p> <p>Notes: dense vegetations on both sides of the levee made the slopes inaccessible</p>					

Photo 3 of 3 : LEVAL\_FA\_2018\_546\_4698.jpg



LM Start	<b>3.20</b>	Rating **	M	Issue No.	<b>30</b>
LM End	<b>3.40</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.818748°	37.819717°
				-121.359440°	-121.362733°
DWR ID	DWR_RD0544_02_s_2013_30				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.20	Rating **	M	Issue No.	111	
LM End	3.20	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.818824 °	37.818824 °	
				-121.359526 °	-121.359526 °	
DWR ID	22679					
Comment Code						
Inspector Comment						
FS_ID:24908 DS_ID:22679 EP_NO: 16972 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pump not found on the waterward side.Damaged pipe-plug on waterside. Pipe exposed on both sides of the levee. FIELD_STRUCT_DESC: 1 of 2: 8-inch polyvinyl chloride (PVC) drainage discharge pipe through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS). Pump on a steel platform in a drainage ditch. (Plans to replace the existing 6-inch drainage pipeline with a 14-inch steel pipeline and to replace two existing 8-inch pipelines with two 8-inch drainage discharge pipelines through the levee authorized under Permit No. 16972, 1999 - Joseph I. and Gayle Muller, TR). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/31/2013						

LM Start	<b>3.20</b>	Rating **	M	Issue No.	<b>111 (cont)</b>
LM End	<b>3.20</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_FA\_2018\_24908\_44898.jpg



WS view: 12" steel pipe (top), two 8" white pvc pipes (bottom) on levee shoulder.

Photo 2 of 3 : UCIP\_FA\_2018\_24908\_44897.jpg



WS view: 8" white pvc pipe with siphon breaker on levee shoulder. An unplugged hole on the pipe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.20	Rating **	M	Issue No.	111 (cont)	
LM End	3.20	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.818824 °	37.818824 °	
				-121.359526 °	-121.359526 °	
DWR ID	22679					
Comment Code						
Inspector Comment						
FS_ID:24908 DS_ID:22679 EP_NO: 16972 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pump not found on the waterward side.Damaged pipe-plug on waterside. Pipe exposed on both sides of the levee. FIELD_STRUCT_DESC: 1 of 2: 8-inch polyvinyl chloride (PVC) drainage discharge pipe through the levee, 2 feet below the crown. Siphon breaker on the waterside (WS). Pump on a steel platform in a drainage ditch. (Plans to replace the existing 6-inch drainage pipeline with a 14-inch steel pipeline and to replace two existing 8-inch pipelines with two 8-inch drainage discharge pipelines through the levee authorized under Permit No. 16972, 1999 - Joseph I. and Gayle Muller, TR). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 10/31/2013						

Photo 3 of 3 : UCIP\_FA\_2018\_24908\_44896.jpg



LS view: pump on steel platform over drainage ditch.

LM Start	3.22	Rating **	A/W	Issue No.	62
LM End	3.22	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.818985 °	37.818985 °
				-121.359675 °	-121.359675 °
DWR ID	DWR_RD0544_02_s_2015_62				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.25	Rating **	U	Issue No.	78
LM End	3.25	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.819347 °	37.819347 °
				-121.360103 °	-121.360103 °
DWR ID	DWR_RD0544_02_s_2017_78				
Comment Code					
RW : Retaining Wall					
Inspector Comment					
Waterside slope retaining wall at pump location has slipped.					

Photo 1 of 1 : FA\_2018\_RD0544\_109\_78\_20180906\_00058.jpg



Looking east at sloughing of earthen pad on waterward shoulder and slope.

LM Start	3.25	Rating **	A/W	Issue No.	93
LM End	3.34	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.819300 °	37.819800 °
				-121.360200 °	-121.361600 °
DWR ID	DWR_RD0544_02_f_2017_93				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:545					
Site Designation:LMA-451					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/18/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_545\_4707.jpg



**\* Location**  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.25	Rating **	A/W	Issue No.	93 (cont)	
LM End	3.34	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.819300 °	37.819800 °	
				-121.360200 °	-121.361600 °	
DWR ID	DWR_RD0544_02_f_2017_93					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:545						
Site Designation:LMA-451						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/18/2017						
Notes:						

Photo 2 of 3 : LEVAL\_FA\_2018\_545\_4712.jpg



LM Start	<b>3.25</b>	Rating **	A/W	Issue No.	<b>93 (cont)</b>
LM End	<b>3.34</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL\_FA\_2018\_545\_4774.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.29	Rating **	M	Issue No.	54
LM End	3.29	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.819635 °	37.819635 °
				-121.360619 °	-121.360619 °
DWR ID	DWR_RD0544_02_f_2014_54				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	3.48	Rating **	C	Issue No.	36
LM End	3.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.819576 °	37.819530 °
				-121.364056 °	-121.364653 °
DWR ID	DWR_RD0544_02_s_2012_36				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Cactus on landside slope.					

No Photos

LM Start	3.49	Rating **	M	Issue No.	55
LM End	3.52	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.819563 °	37.819542 °
				-121.364307 °	-121.364908 °
DWR ID	DWR_RD0544_02_f_2014_55				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 1 : FA\_2018\_RD0544\_109\_55\_20180906\_00039.jpg



Looking southwest at untrimmed trees on landward slope and toe fall 2015.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.51	Rating **	A/W	Issue No.	94
LM End	3.55	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.819500 °	37.819400 °
				-121.364700 °	-121.365400 °
DWR ID	DWR_RD0544_02_f_2017_94				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:544					
Site Designation:LMA-450					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/18/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_544\_4781.jpg



LM Start	<b>3.51</b>	Rating **	A/W	Issue No.	<b>94 (cont)</b>
LM End	<b>3.55</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_544\_4782.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.51	Rating **	A/W	Issue No.	94 (cont)
LM End	3.55	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.819500 °	37.819400 °
				-121.364700 °	-121.365400 °
DWR ID	DWR_RD0544_02_f _ 2017_94				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:544					
Site Designation:LMA-450					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/18/2017					
Notes:					

Photo 3 of 3 : LEVAL\_FA\_2018\_544\_4783.jpg



LM Start	3.57	Rating **	M	Issue No.	19
LM End	3.57	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.819400 °	37.819400 °
				-121.365762 °	-121.365762 °
DWR ID	DWR_RD0544_02_f_2013_19				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.57	Rating **	A/W	Issue No.	95
LM End	3.58	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.819400 °	37.819400 °
				-121.365800 °	-121.365900 °
DWR ID	DWR_RD0544_02_f_2017_95				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:543					
Site Designation:LMA-449					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/18/2017					
Notes:					

Photo 1 of 3 : LEVAL\_FA\_2018\_543\_4790.jpg



LM Start	<b>3.57</b>	Rating **	A/W	Issue No.	<b>95 (cont)</b>
LM End	<b>3.58</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL\_FA\_2018\_543\_4797.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.57	Rating **	A/W	Issue No.	95 (cont)	
LM End	3.58	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.819400 °	37.819400 °	
				-121.365800 °	-121.365900 °	
DWR ID	DWR_RD0544_02_f_2017_95					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:543						
Site Designation:LMA-449						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/18/2017						
Notes:						

Photo 3 of 3 : LEVAL\_FA\_2018\_543\_4799.jpg



LM Start	3.58	Rating **	M	Issue No.	67
LM End	3.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.819419 °	37.819419 °
				-121.365854 °	-121.365854 °
DWR ID	DWR_RD0544_02_f_2015_67				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Large rodent holes on landward slope.					

Photo 1 of 2 : FA\_2018\_RD0544\_109\_67\_20180906\_00044.jpg



Looking northeast at typical view of rodent holes on landward slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.58	Rating **	M	Issue No.	67 (cont)	
LM End	3.58	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.819419 °		37.819419 °
				-121.365854 °		-121.365854 °
DWR ID	DWR_RD0544_02_f_2015_67					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
Large rodent holes on landward slope.						

Photo 2 of 2 : FA\_2018\_RD0544\_109\_67\_20180906\_00045.jpg



Looking north at typical view of rodent holes on landward slope.

LM Start	3.60	Rating **	A/W	Issue No.	96	
LM End	3.61	Issue Type +	Ob	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.819590 °	37.819600 °	
				-121.366320 °	-121.366390 °	
DWR ID	DWR_RD0544_02_f_ 2017_96					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:92						
Site Designation:334-111						
Repair Type: Seepage						
Rating:						
Field Date:						
Notes:						

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.96	Rating **	U	Issue No.	112
LM End	3.96	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.821700 °	37.821700 °
				-121.371752 °	-121.371752 °
DWR ID	22674				

**Comment Code**

**Inspector Comment**

FS\_ID:53367  
DS\_ID:22674  
EP\_NO: 16357  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 10/2/2018 Same as last inspection; WS pipe completely eroded away and therefore poses significant threat to internal levee integrity so crossing remains Urgent (D. Sanoski - DWR UCIP).12/22/2015 Entire top part of pipe on WS corroded through and completely gone. Difficult to see WS due to heavy vegetation. Gully formed on WS slope in alignment with pipe and WS slope is saturated. (K. Fazel - UCIP)06/25/2015 Pipe completely rusted thru on WS slope and has potential to cause great erosion. Pit and holes on pipe and levee. No vent pipe found on WS. No concrete vent pipe found at the LS toe. (K. Fazel - UCIP)  
FIELD\_STRUCT\_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on a concrete sump at the landside (LS) toe. Power pole with transformer at the LS toe. Backflow prevention valve at the LS toe, next to the pump. Pipe is open on the waterside (WS) end. (Plans to place 7 feet of fill on the LS of the crown, to remove existing pump and pipe, to install two slant pumps with 10-inch intake pipes and a 14-inch pipe through the levee, and to place riprap on the WS levee slope authorized under Permit No. 16357, 1995 - Pacific Agrilands, Inc). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced, 8 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.03), 12-inch pipe referenced, 8 feet below the crown].  
FS Date: 10/2/2018 4:19:00 PM

Photo 1 of 3 : UCIP\_FA\_2018\_53367\_43005.jpg



WS view: levee slope with pits and holes.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.96	Rating **	U	Issue No.	112 (cont)
LM End	3.96	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.821700 °	37.821700 °
				-121.371752 °	-121.371752 °
DWR ID	22674				

**Comment Code**

**Inspector Comment**

FS\_ID:53367

DS\_ID:22674

EP\_NO: 16357

Repair Type: Urgent

Crossing Status: Found

UCIP Comments: 10/2/2018 Same as last inspection; WS pipe completely eroded away and therefore poses significant threat to internal levee integrity so crossing remains Urgent (D. Sanoski - DWR UCIP). 12/22/2015 Entire top part of pipe on WS corroded through and completely gone. Difficult to see WS due to heavy vegetation. Gully formed on WS slope in alignment with pipe and WS slope is saturated. (K. Fazel - UCIP) 06/25/2015 Pipe completely rusted thru on WS slope and has potential to cause great erosion. Pit and holes on pipe and levee. No vent pipe found on WS. No concrete vent pipe found at the LS toe. (K. Fazel - UCIP)

FIELD\_STRUCT\_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on a concrete sump at the landside (LS) toe. Power pole with transformer at the LS toe. Backflow prevention valve at the LS toe, next to the pump. Pipe is open on the waterside (WS) end. (Plans to place 7 feet of fill on the LS of the crown, to remove existing pump and pipe, to install two slant pumps with 10-inch intake pipes and a 14-inch pipe through the levee, and to place riprap on the WS levee slope authorized under Permit No. 16357, 1995 - Pacific Agrilands, Inc). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced, 8 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.03), 12-inch pipe referenced, 8 feet below the crown].

FS Date: 10/2/2018 4:19:00 PM

Photo 2 of 3 : UCIP\_FA\_2018\_53367\_43004.jpg



WS view: close view of levee slope with pits and holes.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	3.96	Rating **	U	Issue No.	112 (cont)
LM End	3.96	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.821700 °	37.821700 °
				-121.371752 °	-121.371752 °
DWR ID	22674				

**Comment Code**

**Inspector Comment**

FS\_ID:53367

DS\_ID:22674

EP\_NO: 16357

Repair Type: Urgent

Crossing Status: Found

UCIP Comments: 10/2/2018 Same as last inspection; WS pipe completely eroded away and therefore poses significant threat to internal levee integrity so crossing remains Urgent (D. Sanoski - DWR UCIP). 12/22/2015 Entire top part of pipe on WS corroded through and completely gone. Difficult to see WS due to heavy vegetation. Gully formed on WS slope in alignment with pipe and WS slope is saturated. (K. Fazel - UCIP) 06/25/2015 Pipe completely rusted thru on WS slope and has potential to cause great erosion. Pit and holes on pipe and levee. No vent pipe found on WS. No concrete vent pipe found at the LS toe. (K. Fazel - UCIP)

FIELD\_STRUCT\_DESC: 10-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump on a concrete sump at the landside (LS) toe. Power pole with transformer at the LS toe. Backflow prevention valve at the LS toe, next to the pump. Pipe is open on the waterside (WS) end. (Plans to place 7 feet of fill on the LS of the crown, to remove existing pump and pipe, to install two slant pumps with 10-inch intake pipes and a 14-inch pipe through the levee, and to place riprap on the WS levee slope authorized under Permit No. 16357, 1995 - Pacific Agrilands, Inc). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced, 8 feet below the crown. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.03), 12-inch pipe referenced, 8 feet below the crown].

FS Date: 10/2/2018 4:19:00 PM

Photo 3 of 3 : UCIP\_FA\_2018\_53367\_43003.jpg



WS view: inside view of hole in deteriorated pipe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2018**

**Reclamation District No. 0544 Upper Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Old River	Right	4.15	09/13/2018 09/13/2018	Richard Willoughby

LM Start	<b>4.05</b>	Rating **	U	Issue No.	<b>64</b>
LM End	<b>4.05</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		37.821620°	37.821620°	
			-121.373283°	-121.373283°	
DWR ID	DWR_RD0544_02_s_2015_64				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	<b>4.14</b>	Rating **	A/W	Issue No.	<b>97</b>
LM End	<b>4.15</b>	Issue Type +	Ob	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		37.822400°	37.822600°	
			-121.374410°	-121.374510°	
DWR ID	DWR_RD0544_02_f_2017_97				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:98					
Site Designation:334-103					
Repair Type: Seepage					
Rating:					
Field Date:					
Notes:					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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